

**STRATEGY
RESEARCH
PROJECT**

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

**UNIFICATION OF THE MILITARY HEALTH SYSTEM:
A HALF-CENTURY OF UNRESOLVED DEBATE**

BY

**COLONEL D.E. CASEY JONES
United States Army**

**DISTRIBUTION STATEMENT A:
Approved for Public Release.
Distribution is Unlimited.**

**SENIOR SERVICE COLLEGE FELLOW
AY01**



U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050

20010720 061

USAWC STRATEGY RESEARCH PROJECT

UNIFICATION OF THE MILITARY HEALTH SYSTEM:
A HALF-CENTURY UNRESOLVED DEBATE

by

COLONEL D. E. CASEY JONES, M.D.
United States Army

Rear Admiral Arthur Lawrence
Acting Assistant Secretary for Health
Department of Health and Human Services
Project Adviser

The views expressed in this academic research paper are those of the author and do not necessarily reflect the official policy or position of the U.S. Government, the Department of Defense, or any of its agencies.

U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

DISTRIBUTION STATEMENT A:

Approved for public release.
Distribution is unlimited.

ABSTRACT

AUTHOR: Colonel D. E. Casey Jones, M.D.

TITLE: Unification of the Military Health System:
A Half-Century Unresolved Debate

FORMAT: Strategy Research Project

DATE: 10 April 2001 PAGES: 76 CLASSIFICATION: Unclassified

There has been long-standing debate regarding a unified military health system versus individual service medical systems. This paper reviews the history of the service medical systems, and major reports spanning more than fifty years on this issue. The preponderance of report conclusions urge unification of the military health system.

The service medical systems' counter-arguments are also reviewed and analyzed. That debate, conducted throughout the period of the Cold War, has been fundamentally changed by our entry into a new geopolitical and economic era. Changes in the economic, security, and strategic landscapes, along with profound changes in the national mood, must drive different conclusions than those that impelled policy and organizational structure in the Cold War.

To meet the strategic and security challenges of the next quarter-century, the service medical systems must unify under a single accountable command and control structure.

TABLE OF CONTENTS

ABSTRACT	iii
LIST OF TABLES	vii
UNIFICATION OF THE MILITARY HEALTH SYSTEM: A HALF-CENTURY UNRESOLVED DEBATE	1
A BRIEF HISTORY OF THE EVOLUTION OF THE SERVICE MEDICAL SYSTEMS	2
THE FIRST MISSION	2
THE SECOND MISSION	7
THE THIRD MISSION (AND FOURTH AND . . .)	13
THE GREAT DEBATE ON UNIFIED VERSUS SEPARATE MEDICAL SYSTEMS	14
THE HAWLEY BOARD	14
THE JOINT CHIEFS OF STAFF	15
THE FIRST HOOVER COMMISSION	15
THE SECOND HOOVER COMMISSION	16
THE DOD, DHEW, OMB STUDY	17
THE RICE REPORT	18
THE SRA STUDY	20
THE GRACE COMMITTEE	21
THE "DOC COOKE" STUDY	21
THE "733" STUDY	25
THE FEDERAL ADVISORY COMMITTEE FOR REVIEW OF MILITARY HEALTH CARE QUALITY	26
OTHER ASSESSMENTS	26
THE ARGUMENTS AGAINST UNIFYING THE SERVICE MEDICAL SYSTEMS	26
SERVICE IDENTIFICATION AND TRADITION.....	26
COST SAVINGS	28
PERSONNEL SAVINGS	29
WE CAN DO IT WITHOUT UNIFICATION	29
DISRUPTION OF THE SYSTEM	30
THE CASE FOR A CHANGED LANDSCAPE	34
HAS THE MILITARY HEALTH SYSTEM CHANGED WITH THE LANDSCAPE?	38
THE WAY IT WAS	38
WHY IT WAS THE WAY IT WAS	40

IT STILL IS THE WAY IT WAS	42
STILL ORGANIZED FOR THE COLD WAR.....	44
HAS A NEW CONTEXT CHANGED THE DEBATE?	45
A CHANGED MISSION.....	45
A CHANGED ATTITUDE	49
WHO WILL WIN? WHO WILL LOSE? (WHO WILL RESIST?)	51
LOOSE ENDS.....	53
CONCLUSIONS AND RECOMMENDATIONS	56
ENDNOTES.....	59
BIBLIOGRAPHY	65

LIST OF TABLES

TABLE 1a.....	9
TABLE 1b	10
TABLE 1c.....	11
TABLE 1d.....	12
TABLE 2.....	23
TABLE 3.....	46

More than half a century after being joined, the debate continues to be waged regarding the merits of individual service medical systems versus a unified Military Health System (MHS). The Defense Medical Oversight Committee (DMOC) has recently reincarnated the issue. No less than three new studies are currently under way regarding the question, one commissioned by the DMOC, another by the TRICARE Management Activity (TMA) and a third being undertaken by the Joint Staff. These will join a vast array of past studies, prepared by a wide variety of governmental and non-governmental agencies, commissions, advisory committees, and task forces. Though representing different times and perspectives and produced at the cost of millions of dollars and uncounted hours of effort, all these past studies have just one universally common feature; they have all failed to finally resolve the issue.

Why has the question of unification of the military medical services continually engendered debate? Why has it continually thwarted resolution? Why has this issue generated such an abundance of passion each time it has emerged? Why has the issue maintained currency over the huge changes of more than fifty years? Does the question require resolution now? Can it be resolved? Should the ongoing debate merely dust off and burnish well-worn questions and answers or have the parameters of the debate shifted? Will new parameters drive the question of military medicine's unification to resolution? What will be gained and what will be lost if the service medical systems merge?

This report will review the history and evolution of the MHS and will survey the numerous reports rendered by agencies, commissions, task forces, committees and consultants over the last half-century. Their conclusions along with the counter-arguments of their critics will be presented. Most importantly, the report will establish the argument that the fundamental context that framed this debate in the past has changed. The world strategic and economic landscapes have dramatically shifted and these shifts have induced profound changes in the United States security environment. Domestic perceptions of the role of the military in United States policy and of related concepts such as acceptable loss have altered. Changes in health care in the last twenty years have been rapid, dramatic and are ongoing. The mid-twentieth century view of health care as a benefit has evolved to an American conception of health care as a fundamental and critical right.

With these changes has come a new perception of the function of military medicine both in its traditional role as a Combat Service Support element and in a role serving as a primary element in an array of new missions falling into the category of Military Operations Other Than War (MOOTW). Moreover, military health system beneficiaries' acceptance of their health care

as merely an adjunct to the wartime mission has seriously eroded. Their expectation of health care availability and their perception of military health care as a right parallel the perceptual changes obvious in the civil sector.

The transformation of the Army (and each military service) to best position itself to succeed in accommodating changing missions, perceptions, and goals must be accompanied by a well considered and deliberate transformation of the MHS to support new expectations and requirements. The Cold War context of the fifty-year debate must change to adapt to a new reality if it is to drive the correct conclusions for a new millennium and a transformed military. This report will define the contemporary context of the debate and reframe the arguments and their conclusions.

A BRIEF HISTORY OF THE EVOLUTION OF THE SERVICE MEDICAL SYSTEMS

THE FIRST MISSION

Since the creation of the United States Military, the natures of both warfare and of health care have changed tremendously. In the earliest days of our nation, the Army was composed largely of untrained volunteers in regiments drawn from states, or smaller geographical or jurisdictional areas, who coalesced as circumstance required into larger organizational structures (divisions, corps, armies). Physicians who were organic to regimental units provided health care. Since provision of health care was a regimental responsibility, the availability and quality of health care varied considerably. The lack of uniform standards for medical training and medical care in the early decades of our nation heightened this variability.

There was, at this point, no centralized or formalized, system-wide military medical structure or organization. Given the difficulties of communication, of supply logistics, of transport of the wounded and the general limitations of medical treatment, there was little impetus to, and little point in establishing a centralized military health care system. More compelling than the logistical difficulties, hospitals were something in this era to be avoided. They were places where you were as likely to contract disease or contagion as to receive effective treatment and where treatment itself was as great a threat to a patient as was their medical problem. The limited types of treatment available for battle injury had devastating mortality rates. Those that survived injury and treatment frequently had serious, permanent disability. All these were deterrents to the establishment of a centralized MHS.

In the Navy the ship's surgeon provided health care. Again, the availability and quality of health care services varied from ship to ship but was generally abysmal¹, and there was no

centralized or overarching service medical organization. Though some naval engagements involved multiple vessels, USN ships functioned, for the most part, autonomously. Sick or injured sailors had no chance for timely transport to medical facilities with greater treatment capacity, both because of transport limitations and because such facilities did not exist.²

In the Army and the Navy, therefore, the first tradition regarding medical care, was one of organic medical assets, and regimental or ship responsibility for the limited benefits that health care could provide. There were some early attempts to systematize military medicine and to develop standards for the selection of medical officers and for the establishment of hospitals. These attempts were severely hampered by the lack of creation of a clear organizational structure and command authority for the Director General of the Hospital Department of the Army and by the limitations of communications and of supply logistics.

Following the end of the Revolutionary War, the standing Army was drastically reduced and with it the staff of the Director General of the Hospital Department of the Army. For nearly the next hundred years, until the time of the Civil War, medical care in the military was provided largely as a function of organic regimental assets (the regimental surgeon and surgeons mates). While further attempts were made to establish a centralized medical system and control, care provision through the War of 1812, the Seminole Indian Wars, the War with Mexico and other conflicts was largely local and limited. Knowledge of disease origins and processes, sanitation, and anti-sepsis did not exist and availability of effective treatment for disease and injury was by modern standards primitive.

Significant changes began to occur near the time of the Civil War. Medical, physiology, microbiology and pathology research began to make substantial advances. New communications technology (such as the telegraph) made extension of command and control feasible. More and improved roads, rail, and steamboats offered a means for transporting the sick and injured away from the field of battle for care. Though not a new concept, ambulances came into use, initially manned by military musicians or those capable of only limited, non-combat duty, but evolving to trained ambulance crews and a more routine evacuation process by the end of the war. Female nurses were employed in considerable numbers and to good effect particularly by Union Forces.

The concept of centralized casualty collection and treatment became more practical. Such centralized facilities were not specific to a field unit but rather were "general hospitals" (implying that they would treat any injured soldier regardless of his unit affiliation) and were staffed not by regimental surgeons, but by physicians, surgeons mates and nurses under the direction of the "Surgeon General" (as opposed to unit specific medical assets). While the

centralized medical authority endeavored to exert some control over unit-specific medical personnel, this effort was still considerably hampered by distance, by the tradition of autonomy of individual units and by the limited benefit to field units that a centralized medical organization and authority had to offer.

Nonetheless, the mandate for centralized collection of both reports and of pathology specimens was implemented and sporadically adhered to. It is worth noting that animosity existed between those medical assets organic to field units and the centralized or “general” medical organization. The attempt by the central or general medical organization to exert control over organic medical assets was not well received. Unclear lines of military medical authority did not help the situation. Vestiges of this animosity and command authority haziness continue to exist to this day, between organic, field medical personnel and personnel assigned to fixed medical facilities.

Advances in disease theory, sanitation, anti-sepsis, microbiology and immunization enhanced the value of centralized medical function. By the late 1800s, immunizations for recruits were routine. New knowledge stemming from the collection of data and specimens from the field and expanded understanding of the nature and treatment of wounds enhanced the reputation and value of fixed facilities.

Until this point in the history of the U.S. Military, medical assets were for the provision of care to military members only. Congress, in 1884, made the first statutory provision for Army medical officers and Army contract surgeons to provide free care to the families of officers and soldiers whenever practicable. This marks the beginning of mission duality for the MHS. This duality—the provision by military health care personnel of routine, “peacetime” care for dependents of military members versus the direct medical support of military forces—is very much an issue of debate today.

On the eve of World War I, the major armies [including the U.S. Army] were as generally unprepared to meet the challenge of saving lives on the battlefield as they had been for a hundred years previously. At the turn of the century, most medical service corps had been in official existence for only a few years, none had sufficient manpower or supplies, military physicians lacked standing within their own armies, and surgeons continued to employ techniques that previous wars had shown to be ineffective.³

In WW I the U. S. Army Medical Department expanded and developed greater organization and structure. As the war progressed and lessons were learned or re-learned, care began at the point of injury on the battlefield and was echeloned to successively greater levels of medical capability.

Relatively stable battle lines and the huge time/distance from stateside medical services both allowed and required that considerable medical service capability be located in the combat theater. This was to assure the availability of needed care, but was also to help maintain combat unit strength by returning soldiers to duty if their injury or illness could, in reasonable time, be effectively treated in theatre. A reasonable period of time was defined largely by the difficulty and length of time required to get replacements from the United States including the logistics of movement for both the injured and for their replacements. The non-integration of command and control of medical personnel continued: ". . . certain aspects of health care were under the direct control of the Surgeon General (i.e., general hospitals), however, other aspects (such as ambulance companies and those required to move with the combatants) were either directly or de facto under the control of the local regimental or division commanders."⁴

Though there were advances in science and medical practice between the World Wars (e.g., penicillin, blood transfusion, advancing surgical techniques), medical organization and evacuation was little different in WW II than in WW I. The Army Medical Department expanded greatly during WW II and by its conclusion included seven corps (one of these was exclusively a reserve organization — the Sanitary Corps). These corps grew under the necessity to meet changing needs of the war without the benefit of an organizational or expansion plan. They contained duplications and anomalies as might be expected from unplanned growth.

The immediate post WW II era was the time of United States Executive Branch reorganization and of Defense Unification. Many Executive Departments and Agencies were recognized as being functionally autonomous and essentially out of control. Though contravening Constitutional intent, many agencies tasked with the implementation of federal law (Executive Branch function) answered directly to Congress or to no one at all. Agencies and divisions within Executive Departments, created at different times and by separate legislation often functionally overlapped or even had functions that directly conflicted.

The Department of War, a cabinet level Executive Department, controlled the Army. The Department of the Navy, a separate cabinet level Executive Department, controlled the Navy. The fragmentation of U.S. Military forces was made greater by the Department of the Navy's organization as bureaus that functioned largely independently. The U.S. Military Forces picture was further complicated by the emergence of the Army Air Corps' desire to split from the Army and become an independent military service.

The disorganization and inefficiency of the Executive Department prompted the two famous Hoover Commissions on reorganization of the Executive Branch of the government and promulgated significant changes in the organization of the Executive Branch. The fragmentation

of the military was treated by Defense Unification, the creation of an over-arching Department of Defense at the cabinet level with individual Departments of the Army, Navy and Air Force that devolved to the sub-cabinet level.

It is against this background of federal and U.S Military organizational controversy that the issues of concern of this paper first arose. The Army, over its approximate 175-year history, had evolved its own medical system as had the Navy. The Air Force, originally part of the Army, was now created as a separate military service. Two camps developed regarding the proper means of providing medical support for the Armed Forces. One camp argued for the creation of a unified, standardized, MHS. The newly created Air Force wanted its own medical system. The Army Surgeon General advocated the creation of a single military medical service. The Navy objected to the single medical corps concept. Congress authorized the creation of an Air Force Medical Service. Heading into the Korean War, the United States had four military services (the Army, the Navy, the Marines and the Air Force) with each of these, less the Marines (whose medical support was then and is now provided by the Navy), having their own medical service independent of the others.

In the Korean War, there were two significant changes in evacuation staging and in movement of those injured in battle. The echeloning of care and the sequence of evacuation remained as it had been in WW I and WW II but with the significant exception of the use of the Mobile Army Surgical Hospital (MASH). The MASH units were not integrated into the vertical evacuation chain, but rather, were positioned beside the regimental collecting and division clearing stations. Urgent cases were filtered out of the normal chain and underwent immediate emergency surgical stabilization. After this, patients were returned to the normal evacuation sequence, going to Evacuation Hospitals for either additional treatment or further evacuation. The second medical innovation of the Korean War was the first time use of helicopters for movement of the battle-injured to MASH units. Though the configuration of these helicopters was jury-rigged (external pallets attached to the landing skids) and their availability was limited, to the extent that they were used, they shortened the transit time to the MASH unit and emergency surgical stabilization.⁵

The use of helicopters reached a zenith in the Vietnam War. Their use in this conflict and their increased range caused two changes; one was in the hierarchy of care echelons, and the second was in the already blurred command and control structure of medical assets. The ability of helicopters in Vietnam to quickly travel considerable distances allowed them to move the injured directly to the most appropriate level of care rather than merely to the next echelon. This was in part necessitated by the dispersed nature of the battlefield in this conflict and the lack of

a well-defined front or battle lines. The further blurring of command and control resulted from the centralized training and provision of medical treatment but the combat unit control of the movement/evacuation assets. In other words, the medical crews of aeromedical helicopters were trained and provided by the centralized medical hierarchy, but once fielded, became organic assets of field units under combat unit command.⁶

In reviewing the development of the military medical services in their combat service support role, one sees that their organizational structure tended to develop in response to the stress of immediate requirement rather than by a process of deliberation. As noted regarding the structure of the Army Medical Service at the end of WW II, such a means of organizational development produces overlap and redundancy. Intermittent efforts to consolidate function and eliminate overlap and redundancy have taken place (as they did at the end of WW II), but little has been done to establish organizational structure as the product of a deliberate evaluation of requirements and a determination of the best available method to meet them. In defense of the military medical services, Congress has, over many decades, sent confusing and changing messages regarding the role and obligations of the Military Health System (MHS).

The earlier alluded to duality of the MHS role — medical support of military forces and provision of peacetime, civilian health care to dependents of active duty members, retired military and their dependents — is part of this confusion and sometimes creates diametrically opposed requirements.

THE SECOND MISSION

Having presented a brief overview of the development of the military combat service support role, it is now necessary to provide the same sort of overview of the development of the MHS' other major mission: the provision of peacetime health care to active duty dependents, retired military and their dependents.

The first appearance in legislation of authorization for military physicians to provide routine care to active duty dependents is in the Army Appropriations Act of 1885 (enacted in July of 1884). The language of the legislation is that . . . "the medical officers of the Army and contract surgeons shall whenever practicable attend the families of the officers and soldiers free of charge."⁷ This legislation remained the Congressional justification for provision of medical services to active duty dependents for many decades.

Changes in the perception of health care in the post WW II era and an assessment of medical services provided to dependents caused Congress to re-evaluate the dependent health care benefit in the late 1950s. At that point, changes in tax law had induced business and

industry to begin offering a health care benefit as an employment incentive. A 1956 Department of Defense estimate was that 40 percent of active duty dependents did not have access to federal facilities due to distance, incomplete medical coverage at the federal facility or due to the saturation of services at military treatment facilities. Congress responded by the creation of what later became the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) (The Dependents Medical care Act of June 7, 1956, ch. 374 [PL 569, 84TH Congress], 70 Stat. 250 (1956)). When initially created, this program covered only active duty dependents and the medical benefit was limited.

Congress expanded CHAMPUS in 1966. By this time, provision of a medical benefit was becoming a business and industry standard in the United States. Congress recognized the necessity of remaining competitive with this standard if the nation was to attract and retain a quality military force.⁸ The Military Medical Benefits Amendments of 1966, PL 89-614, 2(6) 80, Stat. 862, 863-5 (1966) broadened the benefit, both in whom it covered and in what it covered. This law extended the CHAMPUS benefit to retired military members and their dependents. The benefit now included a program for the handicapped (currently called the Program for Persons With Disabilities) but was not as expansive as the benefit that could be provided within military treatment facilities. This benefit disparity as well as co-pay costs associated with use of the program were promulgated in hopes of encouraging maximum use of military facilities. The disparity in both benefit and cost however has steadily become a source of ill feeling among beneficiaries who make use of the program in its current form (TRICARE).

Tables 1a, 1b, 1c, and 1d (next pages) give an overview of the current statutory or other authority for the missions of the MHS, particularly for what is commonly considered to be the second mission of the MHS, provision of routine peacetime care to active duty dependents, retired military and their dependents.⁹

TABLE 1a

OBJECTIVES OF THE MILITARY HEALTH SERVICES SYSTEM

Principal Objectives	Supporting or Subobjectives	Basis or Authority	Comment
①	<ul style="list-style-type: none"> a. To provide comprehensive and high quality health services to active duty personnel. b. To develop, implement, maintain, apply, and evaluate health standards for the initial selection, assignment, utilization and selective retention of physically and mentally-fit military personnel, and for the disposition of those determined to be unfit. c. To perform research, development and evaluation required to support military missions and forces. 	Title 10, U.S.C. Sec 3062 (Army) Sec 5012 (Navy) Sec 5013 (USMC) Sec 8062 (USAF)	The citations specify the intention of Congress in establishing the military departments. "(a) It is the intent of Congress to provide an Army that is capable, . . . of . . . (1) preserving the peace and security and providing for the defense, of the United States, the Territories, Commonwealths, and possessions, and any areas occupied by the United States; (2) Supporting the national policies; (3) Implementing the national objectives; and (4) Overcoming any nations responsible for aggressive acts that imperil the peace and security of the United States." (Sec 3062) Sections 5012, 5013, and 8062 read essentially the same as Section 3062 except the terminology is adapted to fit the Navy, Marine Corps, and Air Force, respectively.
	2. To ensure the timely availability of trained manpower and other health resources required to provide support to approved combat, mobilization, and contingency plans of the military forces.	Title 10, U.S.C. Sec 2358	"Subject to approval by the President, the Secretary of Defense or his designee may engage in basic and applied research projects that are necessary to the responsibilities of the Department of Defense in the field of basic and applied research and development and that relate to weapons systems and other military needs, . . ." (Sec 2358)
		Title 10, U.S.C. Sec 3062	Same citation as that used for Objective #1a above; i.e., Sec 3062.

TABLE 1b

Principal Objectives	Supporting or Subobjectives	Basis or Authority	Comment
3. To provide a program of health services to all eligible beneficiaries as currently authorized by law and practice.	a. To help create and maintain morale among active duty personnel by assuring that they, their dependents, and their survivors are provided comprehensive high-quality health services.	Title 10, U.S.C. Sec 1071	This is the general authority for provision of a program of health services. "The purpose of sections 1071-1087 of this title is to create and maintain high morale in the uniformed services by providing an improved and uniform program of medical and dental care for members and certain former members of those services, and for their dependents." (Sec 1071)
			Entitlement to care is specified for beneficiary groups as follows:
	(1) Active duty members	Title 10, U.S.C. Sec 1074 (a)	Active duty members (in military facilities) Under joint regulations to be prescribed . . . a member of a uniformed service who is on active duty is entitled to medical and dental care in any facility of any uniformed service." (Sec 1074 (a))
	(2) Dependents and the survivors of deceased active duty members.	Title 10, U.S.C. Sec 1076 (a) and Sec 1079 (a)	Dependents and survivors of active duty members (in military facilities) A dependent of a member of a uniformed service who is on active duty for a period of more than 30 days, or of such a member who died while on that duty, is entitled, upon request, to the medical and dental care prescribed by section 1077 of this title in facilities of the uniformed services, subject to the availability of space and facilities, and the capabilities of the medical and dental staff." (Sec 1076 (a))
			Dependents of active duty (in civilian facilities) To assure that medical care is available for spouses and children of members of the uniformed services who are on active duty for a period of more than thirty days, the Secretary of Defense, . . . shall contract, under the authority of this section, for medical care for those persons under such insurance, medical service, or health plans as he considers appropriate. . . ." (Sec 1079 (a))

TABLE 1c

Principal Objectives	Supporting or Subobjectives	Basis or Authority	Comment
b. To encourage career commitment among active duty personnel by providing comprehensive high-quality health services for retirees, their dependents and their survivors.	(1) Retired members (2) Dependents of retired and the survivors of deceased retired members.	Title 10, U.S.C. Sec 1074 (b), and Sec 1086 (a) Title 10, U.S.C. Sec 1076 (b) and Sec 1086 (a)	<p><u>Retired members (in military facilities)</u> Under joint regulations to be prescribed . . . a member or former member of a uniformed service who is entitled to retired or retainer pay, or equivalent pay may, upon request, be given medical and dental care in any facility of any uniformed service, subject to the availability of space and facilities and the capabilities of the medical and dental staff. . . ." (Sec 1074 (b))</p> <p><u>Dependents of retired or survivors of deceased retired (in military facilities)</u> Under joint regulations to be prescribed . . . a dependent of a member or former member who is, or was at the time of his death, entitled to retired or retainer pay, or equivalent pay, may, upon request, be given the medical and dental care prescribed in section 1077 of this title in facilities of the uniformed services, subject to the availability of space and facilities and the capabilities of the medical and dental staff." (Sec 1076 (b))</p> <p><u>Retired members, dependents of retired and survivors of deceased retired members, and survivors of deceased active duty (in civilian facilities)</u> To assure that health benefits are available for the persons covered by subsection (c) [see note] the Secretary of Defense . . . shall contract under the authority of this section for health benefits for those persons under the same insurance, medical service, or health plans he contracts for under Section 1079 (a) of this title." (Sec 1086 (a))</p> <p>Note: The persons covered by subsection (c) are: retired members, dependents of retired and survivors of deceased retired members, and survivors of deceased active duty members.</p> <p><u>Other eligible beneficiaries (in military facilities)</u> The personnel of all other Federal agencies are provided for by the Economic Act of June 30, 1932, 47 Stat. 417, as amended by 31 U.S.C. Sec 666.</p>
			7

TABLE 1d

Principal Objectives	Supporting or Subobjectives	Basis or Authority	Comment
4.	a. To provide a full spectrum of medical diagnostic problems essential for the continuing education, training, development, and challenge of health professionals. b. To conduct clinical investigation, training, and education functions essential to maintain qualified health service staffing and to provide health services.	A broad interpretation of P.L. 92-426, Health Services Revitalization Act of 1972.	
5.	To maintain a system of health services that functions as effectively and efficiently as possible.	a. To assure the complete and efficient utilization of all Department of Defense health resources.	Implicit responsibility of all managers of public resources.

THE THIRD MISSION (AND FOURTH AND . . .)

The role of the MHS is still further complicated by requirements that are adjuncts to the accepted roles and missions and by requirements that are implicit in the primary, statutory roles and missions. Some of these additional requirements are formally recognized and defined:

Purpose: To make medical care available to members of the uniformed services and their dependents in order to help ensure the availability of physically acceptable and experienced personnel in time of national emergency; to provide incentives for armed forces personnel to undertake military service and remain in that service for a full career; and to provide military physicians and dentists exposure to the total spectrum of demographically diverse morbidity necessary to support professional training programs and ensure professional satisfaction for a medical service career.¹⁰

Noted but less formally stated purposes of the MHS include such things as the "peace-of-mind" factor for deployed troops, in their knowing that their families will receive necessary medical care and thus being able to fully focus on their mission.

Medical research and graduate medical education are justified as necessary to fulfill the medical system's combat service support mission, to provide adequate and ongoing training for health professionals and to provide the professional fulfillment necessary to retain high quality health care professionals for a career on active duty.

The roles and missions of the MHS are founded in law. Numerous reports on the consolidation issue have noted that the two fundamental missions of the MHS, assuring a healthy force and caring for those injured in training or in combat and providing routine peacetime medical care to non-active duty beneficiaries as provided by law, have areas that mutually enhance one another and areas that conflict with one another. Both the mutual enhancement and the conflict will be further addressed later.

The organizational structure of the service medical systems can be seen to have evolved from the practical and ethical necessity of caring for soldiers, sailors, marines, and airmen who become diseased or injured in the course of duty. Medical services and organizational structure developed as needs were perceived and met. They have been intermittently modified to accommodate greater efficiency or statutory requirements but in reviewing the history of the service medical systems, it becomes apparent that much of their current organizational structure is founded not in necessity or even deliberation, but rather in tradition. The distinction will become important in the later analysis.

THE GREAT DEBATE ON UNIFIED VERSUS SEPARATE MEDICAL SYSTEMS

Immediately following the Second World War, during the era of Defense Unification, Major General Norman Kirk, the Surgeon General of the Army, appeared before the Senate Armed Forces Committee and argued for amalgamation of military medical services. His fellow Surgeons General powerfully disagreed with his position and favored individual service medical systems.

Then Chief of Staff of the Army, General Dwight D. Eisenhower, wrote to General Carl Spaatz, Chief of the Army Air Corps:

. . . after having given careful consideration to the problem of providing medical service for the Armed Forces I have reached the conclusion that there is but one real solution, the establishment of a single, integrated medical service. . . . People keep questioning our personal intent re separate services for the Air Force The current example is a Medical Corps. I will oppose the plan with all of the emphasis that I can possibly develop . . . to my mind it is absolutely silly . . . (to have individual service medical systems).¹¹

THE HAWLEY BOARD

The Hawley Board has the distinction of being the first of many boards, committees, task forces, panels, and commissions to look at unifying the military medical services. The board was composed of Major General Paul R. Hawley, a retired Army Surgeon General, and the three sitting Surgeons General: Raymond W. Bliss (Army), Clifford A. Swanson (Navy), and Malcolm C. Grow (Air Force). Secretary of Defense James Forrestal charged the board to address:

Improvement in the utilization of the existing hospital facilities of the several medical services. This will include consideration of the number of hospital beds required in each geographical area to meet the collective needs of the three services, a study of which hospitals are so located as to make it feasible for them to serve more than one of the Departments, and a determination as to which hospitals, if any, should be closed Coordination of the current plans of the medical services of the Armed Forces for the construction of any new hospital facilities in the future Methods for improving the organization, management and administration of the several medical departments in the operation of both their hospital and medical programs, including the possibilities of consolidation or coordination of certain activities and functions thereof, and the reduction of the combined overheads of the medical services of the Armed Forces Allocation to one service of the responsibility for providing all hospitalization and medical care for all services in certain fields of medicine, as for example, in the fields of tropical medicine, neuropsychiatry, radiological injuries, prosthetics, and serious disorders of the ear and eye Development, to the highest practicable degree, of common standards, practices and procedures among the medical services of the Armed Forces with respect to . . . the organization, administration and operation of hospitals.¹²

This board approached the issue with an assumption of jointness rather than unification as its frame of reference. Indeed, the charges of the Secretary are seen to allow or even imply the presumption of coordination rather than consolidation (except in limited areas). The recommendations of the Hawley Board included the closure of hospitals in each of the services, but maintenance of individual service medical systems. Operational matters were retained as the province of the service Surgeons General. It suggested that policy, planning, and organizational issues could become the purview of an agency of the Office of the Secretary of Defense, though such an agency did not at that time exist.

The impetus for the work of this board was a grave concern about a national shortage of health care professionals. "The Committee wishes to strongly emphasize that its recommendations and proposals as contained in this report are predicated primarily upon the impelling necessity effecting every feasible economy in the utilization of funds and medical personnel, and especially in view of the shortage in available doctors, dentists, and nurses."¹³

THE JOINT CHIEFS OF STAFF

About a month after the date of the Hawley report, the Joint Chiefs of Staff unanimously recommended to Secretary of Defense Forrestal that he "immediately institute studies and measures intended to produce, for the support of the three services, a completely unified and amalgamated [single] medical service."¹⁴

THE FIRST HOOVER COMMISSION

The Hawley Board and the First Hoover Commission drew differing conclusions from essentially the same facts. Both were concerned about the uncoordinated expansion of the medical infrastructure of military health facilities. Both noted with concern an impending shortage of health care professionals in the United States.

The First Hoover Commission Report on Organization of the Executive Branch of the Government, which was transmitted to the U. S. House and Senate at the same time that the Hawley Report and the JCS recommendations were transmitted to the Secretary of Defense, is noted in several subsequent reports to have recommended that the services retain separate medical systems. This is not entirely accurate. The confusion may arise from a cursory reading of the report, which in part states ". . . under this plan, the services would remain intact, except for hospitalization within the United States. Each of the three services would retain one major teaching and research center (such as the Naval Medical Center at Bethesda, MD, and the Walter Reed General Hospital, Washington, DC)."¹⁵

What is missed in a less than full reading of the report is that the commission advocated the creation of a United Medical Administration to consolidate *all* federal medical services within the United States, including (with the exceptions noted above) the military medical services, the Veteran's Administration, the Public Health Service, the Bureau of Prisons, the Bureau of Indian Affairs and all federal medical research activity. Organizational charts included in the report clearly show the military hospitals as part of, and subservient to, the proposed United Medical Administration. Further, the report noted that members of the three service medical systems would, under the recommended plan, serve within the United Medical Administration in the continental United States. The services would have retained a teaching medical center apiece, overseas hospitals, and outpatient facilities. The proposal of the Hoover Commission was, thus, much closer to a recommendation of consolidation (or super-consolidation) than to maintenance of complete and independent service medical systems.

The First Hoover Commission saw the impending physician shortage as an argument for the consolidation of all Federal Medical Services, including CONUS military hospitals, into a United Medical Administration. The military strenuously objected.

By this point, General Eisenhower, then Chief of Staff of the Army, the Army Surgeon General, and the Joint Chiefs had aligned in favor of a unified MHS. The Secretary of the Air Force and the Hawley Board recommended individual service medical systems and the First Hoover Commission was inaccurately represented as favoring individual service medical systems.

In June 1949, Congress and the Secretary of Defense created the Air Force Medical Service. On June 7th, Secretary of Defense Louis Johnson, "announced the appointment of Dr. Raymond B. Allen, President of the University of Washington, Seattle, as Director of Medical Services of the National Military Establishment . . ."¹⁶ This civilian position became the Assistant Secretary of Defense for Health Affairs, or ASD(HA).

THE SECOND HOOVER COMMISSION

The Second Hoover Commission (1955) is also said, in subsequent reports, to have recommended that the services retain independent service medical systems. A more careful reading of the Second Hoover Commission, however, presents a less simplified conclusion.

When unification of the armed services was proposed and finally legalized in 1947, one of the major arguments for it was it would facilitate the unification of their medical services, but this has not been realized because of the unrelenting opposition of the armed services. Actually there is duplication and even competition between the army, navy, and air force in providing medical services.¹⁷

The first Hoover Commission found:

There is duplication and even competition in the provision of services by the Army, Navy, and Air Force. There are too many small hospitals and infirmaries within easy reach of large facilities which have empty beds and not overburdened staffs. Medical specialists are too scattered — many of them are in hospitals which cannot make full use of their valuable training or skills.

The situation has not improved in the ensuing years. Since unification of medical services has not been and probably cannot be attained, the Commission felt that under the circumstances regionalization of the military medical services is the best practical solution of the problem.¹⁸

The Second Hoover Commission scaled back its recommendations regarding military medical unification, less from a conviction that a scaled back recommendation was the correct answer than from recognition of, and capitulation to, political expediency. The Second Hoover Commission made their recommendation with the acknowledgement that there was not the political will to unify the service medical systems.

The second Hoover Commission found "duplication and waste in the medical services of the armed services."¹⁹ It was critical of independent medical systems for the armed services but recommended, as a political and practical expedient, regionalization of military medical services, a lesser form of cooperation, since it was clear to the Commission that the goal of unification of military medical services was not then achievable.

THE DOD, HEW, OMB STUDY

The Vietnam War occupied the military services from the mid-1960s through the early 1970s. With the end of that conflict, the doctor draft also ended. The Office of Management and Budget, the Department of Defense and the Department of Health, Education and Welfare undertook a review of the entire military health care system. This study was induced by the belief that the end of the draft would cause a severe shortage of military physicians. There were also concerns about rising costs and about the equity of benefits in the MHS, and more generally, about the equity of benefits in the many federal programs that directly or indirectly provided medical care.

This mammoth study took two years to complete and its report and support papers occupied two metropolitan-telephone-book-sized volumes. It drew a variety of conclusions that generated an equivalent number of recommendations, among which were a recommendation for a central entity to coordinate planning within the military medical services. Though many of the duties and powers of this central entity were described in the report, its organizational make-

up was not clearly defined. Participants in this study, while agreeing on the concept of a central coordinating entity, did not agree on its composition and authority.

While the MHCS [Military Health Care Study] Steering Committee was not in agreement about the precise form of the organization, there was agreement that a central entity is necessary to provide coordination and oversight of health care delivery in DOD. Consequently, the Project Team did not attempt to prescribe an organization structure or reporting relationships for this central entity, and recommends that this be accomplished within DOD.²⁰

Without a clear organizational plan and agency definition, this recommendation resulted eventually in the establishment of the Defense Health Council. This council had little authority. While it served as a medium for the exchange of information that might be useful for coordination, the services could ignore it as they chose.

THE RICE REPORT

In 1977, President Jimmy Carter requested a "searching organizational review" into resource management issues in the Department of Defense. The Secretary of Defense commissioned a study that was headed by Donald B. Rice, Ph.D. The report was completed and rendered in 1979 and, while formally called the Defense Resource Management Study (DRMS), is commonly referred to as the "Rice Report." This report was part of a larger review of the resource allocation decision process, weapons systems acquisition, logistical support to combat forces, the career mix of enlisted personnel, and the MHS. The MHS was among the major issues the report addressed. Perceived inefficiency in the areas of the report's inquiry was the impetus for its commissioning.

This report is usually characterized as recommending the continuation of individual service medical systems but it highlights inefficiencies and failings in planning and coordination — especially of peacetime health care, the area of the MHS on which it focuses. In pointing out these inefficiencies and failings, it reiterates concerns raised by all previous reports. Though now dated, the report is well deliberated. It was the first of the major reports to strongly affirm the legitimacy of both the statutory roles of the military health care system: maintenance of the health of the active duty force in peacetime and attendance to the disease and injury of those sent into conflict; and provision of health care to eligible non-active-duty beneficiaries as allowed and required by law. This report pointed out that these two missions are simultaneously inextricable and conflicting. The report also highlighted a problematic disjunction in the perception of the second mission of the military health care system, peacetime health care. The system managers, it noted, tended to view the second mission as a byproduct of the first, with

care for non-active duty beneficiaries to be provided as time, resources and attention to the first mission allowed. The beneficiaries of the second mission, however, viewed the provision of care by the MHS as a benefit, and failure to provide this benefit as a breach of faith and promise.

The report also highlighted deficiencies in medical readiness planning, the meagerness of medical training for wartime tasks, the weakness of medical leadership from the Department of Defense, and a lack of useful management information.

This report called for stronger and more aggressive management from the ASD(HA), but specifically declined to address the question of consolidation of the service medical systems into a unified system:

Several of the numerous previous studies of military health care have recommended some form of consolidation. Energy expended in the ensuing debate has tended too often to divert attention from other more important issues. The DMRS [Rice Report] has not taken up the consolidation question on the grounds that it is not the right place to start: more fundamental questions dealing with roles and missions require attention before the value of consolidation can ever be assessed. Moreover, it is difficult to show that either regional commanders or a central DOD agency would substantially improve the efficiency or effectiveness of the health care system, or to show that they would not.

This may well be another question on which the two missions pull in opposite directions. With the benefit mission solely or primarily in mind, consolidation, perhaps even the creation of a single, unified DOD health care agency, seems attractive. But with the readiness mission primarily in mind, the current, decentralized system, more closely linked to the deploying forces, seems better. With the realization that desirable objectives can often conflict, *the DRMS opts for a more concerted effort to pursue both missions through the current, decentralized system*. If the recommendations made earlier in this study are implemented and the system does not improve enough, then the question of consolidation should be reopened.

Nevertheless, stronger leadership and more aggressive management by the Secretary of Defense, the Assistant Secretary of Defense (Health Affairs) and the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) are clearly warranted.²¹

Though denying that they would address the issue of consolidation, the report, as seen above, made a weak recommendation for maintenance of the status quo with the caveat that the issue should be revisited if other recommendations in the report failed to correct perceived deficiencies in the system.

In 1981 (only two years later), the House Appropriations Committee (HAC) evaluated the organizational structure of the Military Health Care System. It concluded that the ASD(HA) was unable to monitor the activities of the military medical services and had no direct line of authority over them; further, it noted that DOD had rejected all recommendations for stronger central

DOD management of military medical activities by ASD(HA). The HAC's evaluation also noted, as had the Rice Report, that the military had not clearly defined its peacetime medical mission, had no consistent basis for determining resource requirements in the military direct care (non-CHAMPUS) system and that staffing criteria for military facilities were inconsistent.

A year later (1982), the Senate Armed Services Committee held hearings to address medical readiness, the management of peacetime health care delivery by the military, and issues of medical quality assurance. Testimony by the Surgeons General indicated that, in the event of a NATO/Warsaw Pact conflict, the MHS could provide necessary care for only one in ten casualties. The Senate was particularly troubled by this testimony in view of the rising costs of military medical care, media reports of poor quality, and the inability of the system to define the elements of an annual system cost that exceeded \$7 billion.

As a result of their dismay, the Senate directed the Secretary of Defense to "study the feasibility and benefits to be gained by creating a Defense Health Agency (DHA) . . ."²²

THE SRA (SYSTEMS RESEARCH AND APPLICATIONS CORPORATION) STUDY

Congress called for this study to again consider the reorganization of the individual service medical systems into a single system. Systems Research and Applications Corporation (SRA) was contracted to perform the study. Their report was rendered in 1983. The SRA Report was prompted especially by the Surgeons' General testimony to Congress that the MHS was incapable of caring for anticipated battle casualties. Congress' perception of the military health care system was one of inefficiency and poor management. The specific charge to SRA was to assess the feasibility of the creation of a Defense Health Agency (DHA). Given that charge, it was probable the report would conclude that creation of a DHA was feasible — and it did.

The report went on to advocate the creation of a DHA. Its advocacy was based on its conclusion that creation of such an agency (unification of the individual service medical systems) would result in improved readiness, and substantial cost decreases. The report further noted that readiness would be improved by the Service Surgeons General focusing on mobilization needs rather than peacetime health care. It proposed that management of all fixed military medical facilities become the purview of this DHA.²³

The Surgeons General of the three military medical services responded to this report. Each recommended some degree of increased planning or coordination but did not endorse the creation of a DHA.

THE GRACE COMMITTEE

During the same time the SRA Report was being researched and prepared, President Reagan commissioned a study entitled the "President's Private Sector Survey on Cost Control: Report on Federal Hospital Management." J. Peter Grace chaired this committee, the report of which is commonly called "the Grace Committee Report." The thrust of this report differs from that of the SRA report, but nonetheless draws many of the same conclusions.

The Grace Committee was charged to look at the efficiency and the cost of all federal health care facilities. In fact, its official title designates it as a "Survey on Cost Control." The impetus for its formation was cost and perceived inefficiency, as had prompted earlier reports. Regarding the military part of the federal hospital system it found that:

The evolution of the . . . (MHS) as three separate hospital systems without central control has produced a system that operates a disproportionate number of underutilized hospitals with a shortage of technically and professionally skilled personnel. Major renovation and construction projects are planned without sufficient regard for efficiency, demand, staffing needs, or location of other armed forces hospitals. The three autonomous health care systems do not effectively share services and equipment with one another (nor with the VA's health care system) and, thus, do not avoid the unnecessary duplication and under-utilization of facilities and equipment. Without central authority, the system has little chance of overcoming its redundancy and inefficiency.²⁴

The conferees on the Fiscal Year 1990 Defense Appropriations Act requested that the Department of Defense submit a plan for a more centralized organization of the MHS. This began a flurry of activity, which, with some peaks and valleys, has continued to the present. Dr. Enrique Mendez, the ASD(HA), solicited opinions and comments from the Service Surgeons General, and established a working group to consider consolidation of health care functions. This group included representatives from the Office of the ASD(HA), the JCS, DOD Comptroller, the Army, the Navy and the Air Force. They reviewed two possible consolidation models. Their ultimate proposal was for a Joint Health Advisory Council for "promoting increased service coordination, cooperation and responsiveness to direction from the ASD(HA), and preserving the balance of responsibility, accountability and authority for both the ASD(HA) and the service secretaries at least risk."²⁵

THE "DOC COOKE" STUDY

Later that same year (1990), the Secretary of Defense requested his Director of Administration and Management to:

... conduct a study to determine the optimum organization of medical functions within the Department of Defense to achieve the following objectives: (1) to provide medical services and support to the armed forces during combat operations; (2) to provide medical services and support in peacetime to members for the armed forces, their dependents, and others entitled to medical care provided by the Department of Defense; and (3) to achieve fully both of the above objectives, at the lowest feasible cost to the taxpayers.²⁶

The Review of the Department of Defense Organization for Health care was completed in March 1991. The "Doc Cooke Report," as it is most often called, was instigated by Congressional concerns of rapidly rising military health care costs, particularly in the purchased (CHAMPUS) civilian care arena. The report was terse and direct in calling for a single, accountable individual to lead the entire MHS. The five alternatives were:

- The status quo (immediately rejected as unable to meet future needs)
- Creation of a separate military medical service (the "purple suit" — immediately rejected as too politically controversial)
- Strengthening of the role of the ASD(HA) (assessed as the least disruptive)
- Creation of a functional joint medical command (USMEDCOM) commanded by a flag officer (CINCMEDCOM)
- Creation of a Defense Health Agency headed by either a civilian or a flag officer

Only the latter three options were *seriously* considered by the study panel. Using a matrix of advantages and disadvantages and an analog scale to rate the options (reproduced as Table 2, next page), the panel strongly favored the creation of a Joint Military Medical Command.²⁷ Their second choice was a Defense Health Agency. Their very distant third choice was strengthening the Assistant Secretary of Defense for Health Affairs. Only by designation of a single, accountable individual, the report insisted, could significant economies and improved process (especially for readiness) be achieved.

TABLE 2**ADVANTAGES/DISADVANTAGES OF DOD LEVEL ALTERNATIVES**

ADVANTAGES	STRENGTHEN ASD(HA)	MEDCOM	DHA
Integrates policy and resource management	2	2	3
Improves mechanism for service health program tradeoffs	1	3	3
Retains decentralized execution of health care delivery	3	3	3
Improves mechanism for DoD-wide management improvements, cost-cutting, force reductions	1	3	3
Strengthens centralized direction, authority, and control	1	3	3
Improves standardization (manpower, resources)	2	3	3
Provides single spokesman for DoD health matters	1	2	3
Integrates peacetime and readiness requirements	1	3	3
Integrates guidance/control of war plans, readiness, and health care operations	1	3	2
Keeps military in charge of medical readiness planning and operations	3	3	1
DISADVANTAGES			
Increases dependence on ASD(HA) willingness to exercise authority and integrate budget	3	1	1
Reduces service roles	2	3	3
Weakens mechanisms to integrate and balance CHAMPUS and direct care delivery	2	1	1
Continues operational role of ASD(HA)	2	1	2
Weakens policy of "Service takes care of its own"	1	2	2
Downgrades perceived stature of MHSS structure	2	1	1

Degree of effect of advantages/disadvantages on the alternatives are shown by the following scale:

- 1 - Little or no Effect
- 2 - Moderate Effect
- 3 - Significant Effect

The figures used are based on subjective judgements and are designed to indicate impact and degree. (i.e., 2 does not mean twice as much as 1.)

The services responded vigorously to the report. The summation of their response was conveyed to the Chairman of the Senate Armed Services Committee by the ASD(HA). He noted that he had internally reorganized his office, and that initiatives were underway to improve the efficiency of the MHS — specifically the change to a coordinated care model for the system. He and the surgeons general did not feel that unification was advisable or necessary given steps already being taken. They voiced concern over the unnecessary disruption a major organizational change would cause without clear evidence of benefit to be achieved.²⁸

The Chairman of the Joint Chiefs of Staff, General Colin Powell, wrote a memo critical of the report to the Deputy Secretary of Defense. In it, he contended that the study provided an insufficient basis for decisions that would impact on medical readiness and weighed in against any substantive change in the organizational structure. He encouraged further study.³⁰

The House of Representatives supported unification of military medical services. The Senate did not take up the issue. The result of this impasse was a decision by the Deputy Secretary of Defense to strengthen the ASD(HA) — the option least favored in the Doc Cooke Report. This Memorandum created the Defense Health Program (DHP), a separate budget account for health care within the defense budget. It also created the Defense Medical Advisory Council and endorsed activities already undertaken by the ASD(HA).³¹

Though the report did not formally choose among the last three alternatives listed, it strongly recommended the investment of a single, accountable individual, responsible for both the readiness and peacetime health care missions. It further concluded that the readiness and peacetime health care missions were too inextricably intertwined to be managed individually. The report stated flatly that any cost benefits to be realized by changes in the organizational structure of the MHS would directly depend on the degree to which the system was placed under a single, central authority.

This report was completed at the time of DESERT STORM. Other factors then very much in operation were hopes for a “peace dividend” from the dismantling of the Berlin Wall and the Soviet Union, downsizing of the standing forces and decreases in defense budgets. The three Surgeons General all favored maintenance of individual service medical systems. The ASD(HA) was in the midst of attempting to change the system to a coordinated care model. This represented an already huge change for the system and he was concerned about the additional disruption that would be caused by a major revision of the organizational structure. He too, favored minimal organizational changes. These consisted of the coordinated care effort already underway, reorganization of his own office within the DOD, centralization of policy control but

decentralized execution of policy by the services, and centralization of budget control for the MHS within the Office of the ASD(HA).

The result of these disparate perspectives was a memorandum from the Deputy Secretary of Defense. Several portions of the memorandum merely required further study or review of issues then current (e.g., defense medical research coordination, medical performance measurement). The significant changes required by the memo were two: the first was the creation of the Defense Health Program (DHP) and the second was creation of the Defense Medical Advisory Council. Prior to the creation of the DHP, service medical system budgets were part of individual service budgets. The DHP consolidated system medical costs and channeled the annual appropriation for the MHS through the ASD(HA) rather than through the services. The DHP includes costs for both direct care (military facilities) and purchased care (civilian providers and facilities).³²

The Defense Medical Advisory Council was established to advise the ASD(HA) in the "execution of the DOD medical mission." The ASD(HA), representatives of the three service secretaries, flag officer representatives of each of the services, a representative of the JCS, and the president of the Uniformed Services University of the Health Sciences (USUHS) comprised the council. The memorandum granted neither this council, nor the ASD(HA) any direct command authority over service medical assets. Command authority over the service medical systems continued to be vested in the individual services.

THE "733" STUDY

Though not specifically a report to evaluate consolidation of military medical services, the "733" Study looked at the physician strength required to support two nearly simultaneous regional conflicts. This study was required by Section 733 of the 1992 Defense Appropriation Act, but was not submitted to Congress in final form until May of 1999. This study is sometimes associated with the consolidation issue, probably because it looks at mission requirements from a tri-service coign of vantage.³³

As this report is being written in the late winter of 2001, there are no less than three studies nearing completion regarding the unification of military medical services. The Defense Medical Oversight Council, a reconstituted Defense Medical Advisory Council with some teeth, has commissioned the RAND Corporation to look at the issue of consolidation. The TRICARE Management Activity (TMA), a field operating agency of DOD (HA) and nominally responsible for all medical services in the worldwide MHS, has also commissioned a contractor to study the issue of consolidation. The Joint Staff is also conducting its own study on this issue.

THE FEDERAL ADVISORY COMMITTEE FOR REVIEW OF MILITARY HEALTH CARE QUALITY

While not a study specifically directed to address the consolidation issue, the Federal Advisory Committee on Military Health care Quality submitted its report to Congress in March 2001. This panel looked exhaustively at the MHS from the perspective of the quality of medical care within the system. Based on considerations of improving health care quality, one of its overarching recommendations was the unification of the MHS.³⁴

OTHER ASSESSMENTS

The topic of a unified MHS has also not escaped scholarly notice. It has been the subject of multiple Army War College research projects and exercises,^{35,36,37,38,39} as well as journal dissertations.⁴⁰

THE ARGUMENTS AGAINST UNIFYING THE SERVICE MEDICAL SYSTEMS

The arguments against unification have raised the following issues: the importance of individual service identification by both health care providers and their patients; the differing cultures and traditions of the services requiring service-specific health care personnel who understand the culture and mission of the service; a lack of verifiable data supporting cost savings of unification; the lack of a verifiable savings of administrative, managerial, and clinical personnel from unification; that the objectives of unification can be achieved by measures well short of unification, by increased collaboration and coordination among the three service medical systems; and the severe disruption that would be caused by major organizational realignment.

SERVICE IDENTIFICATION AND TRADITION

Imagery is powerful. Verbal communication is only ten per cent in the words. The rest is in tone, nuance, body language — the vehicle of the message.

"When we witness a red-faced executive shouting, "Who's excited? I'm not excited!" we realize that the feeling is much more important than the words. That's why in all communication it's crucial to listen to the music as well as the lyrics, the feeling behind the words as well as the words themselves . . . this phenomenon is something I call meta-messages. They tend to be invisible but are nevertheless indelible.

In all of life, the meta-message tends to be more powerful than the message itself."⁴¹

This might be made an argument for maintaining separate, uniformed military medical systems. Wearing the same uniform is powerful imagery — a powerful meta-message. It implies, “we are the same, we understand one another, we have a bond, a commitment to one another . . . we share an ethos.” Does wearing different uniforms imply the converse — “we are not the same, we do not understand one another, we have no bond, no commitment to one another . . . we do not share an ethos”?

The positive imagery of wearing the same uniform has force. That power is legitimate justification for raising it as a point for debate. Such a point implies however that wearing a different uniform, at the best, calls into question those statements wearing the same uniform makes, and at the worst conveys their opposite. Rational reflection will not grant either of these surmises.

The ethos of the military culture is not exclusive to a single service, nor is it substantially different across the services. Personal experience attests to this. Beyond that, in asking senior line officers in the Army whether or not it is important to them to receive medical care from, or to deploy with, medical personnel who wear the same uniform, the summation of responses is: “all things being equal, I would take an Army “doc” over one from some other service, but the truth is that I just want good medical care and if I have that, I don’t much care who’s giving it.”

For the last fifty years, and more in the new millennium than ever before, jointness is not only a motto but also a reality. Joint assignments are increasingly common. Collocation of the military bases of multiple services has made commonplace the treatment of a member of one service in a treatment facility of another service. It is well established that cross service medical care of military personnel causes no serious difficulty or emotional discomfort.

To the argument that deployment with “your own” is a different issue, the Marine Corps provides a response. The Marines are considered to be the most tightly knit, most strongly self-identified, most wedded to tradition of all the military services; yet they deploy, not with Marine medical personnel and combat medics, but rather with Navy medical personnel and medics. Navy medical folks, who have been assigned with Marine units, say that they faced no issues of lack of acceptance. Further, the Navy medical personnel assigned to Marine units tended to adopt the Marine culture while assigned and became as enthusiastic about “the Corps” as their line colleagues.

To the argument that each service has mission differences that must be accommodated by service specific medical personnel, one may again point to the Navy, whose medical service cares for the medical needs of naval aviation, of undersea medicine, and of Marine ground

forces. There is no evidence that Navy medical personnel have difficulty acquiring the competencies to effectively meet the nuances of any of these.

Joint operations are an undoubted fact of U.S. military deployment. In the Gulf War, cross service medical care of military personnel occurred with no evidence of it causing difficulty. While acknowledging the possible value of service medical specificity in a time when the military services functioned more independently of one another, it is hard to imagine, in the environment of 2001 and for the foreseeable future, that an argument for its necessity could carry much weight.

Imagery is powerful. The unification of the MHS is often called the “purple suit” option.⁴² The “purple suit” is purportedly the color of uniform that would result from the blending of Army green, Navy blue, and Air Force sky-blue. A moment’s consideration tells us this is not so—but there is great power in imagery; and there are quiet surmises implicit in the image. A purple suit could only be ugly; wearing a purple suit can hardly be imagined and if it can be imagined, can only be imagined to be embarrassing. Purple is not a color that commands itself to military thought; in fact, a “suit” does not suggest the military at all. The term is sometimes used in derogation, but is probably more devastating when used casually — the implicit message already assumed. The term “purple suit” generates a fog charged with emotion that serves to obscure objective consideration of the unification issue.

COST SAVINGS

Though many reports have claimed and even quantified the human resource and fiscal savings that would accrue to unification of the service medical systems, it is doubtful that any such claims or savings could be validated. The lack of detailed fiscal accounting within the MHS has regularly vexed Congress and has played a prominent role in the generation of the numerous studies of the last half-century. The military medical services have until very recently made little attempt to cost account the health care they provide. Negotiations with the Health Care Financing Administration (HCFA) in preparation for the TRICARE Senior Prime Demonstration Project remained long at impasse and nearly collapsed over the MHS’ lack of ability to validate the cost of its services.

The MHS has made significant strides toward improving performance in this area, but accurate, detailed, unassailable fiscal data in the military health care arena will not be available earlier than several years from now.

PERSONNEL SAVINGS

Similarly, personnel savings to be gained by consolidation of the service medical systems are speculative, even if intuitively appealing. A random selection of organizational management texts will support arguments for the personnel economies-of-scale that larger organizations afford. The same random selection of texts will equally support arguments that a specified amount of work, efficiently performed, will require a specified number of people regardless of the number of organizations used to undertake the workload.

Since there is, at present, no indisputable basis to effectively resolve the dollar and personnel savings—or non-savings—arguments, it is not productive to undertake those arguments. That these previously central issues in the debate cannot be definitively resolved might seem a justification to preserve the status quo. On the other hand, the status quo has been consistently viewed as wasteful, duplicative, detrimentally competitive, inefficient, and non-accountable. These hardly commend the status quo.

Though unprovable, it seems intuitively obvious that an ability to cross level budgets and personnel within the MHS would confer benefits especially if coupled with standardized, industry respected resourcing models. This is not presently possible across the service medical systems.

WE CAN DO IT WITHOUT UNIFICATION

At each successive iteration of review and in response to the invariable call for unification or greater centralized control of the MHS, the services have responded that the same end can be and will be achieved by tri-service councils, tri-service committees, tri-service task forces; that these collaborations will achieve the called-for objectives without the loss of service identification and without the disruption of major reorganization.

Despite avowed intentions that stretch across more than fifty years, there is persistent evidence that such efforts have been less than fully successful. A GAO report published in 1999, pursuant to a legislative requirement, studied military health care services in the National Capitol Area (NCA) but intimated that their findings could be applied to the entire system.

"Despite successful DOD and service efforts to improve MHS management, DOD still lacks a comprehensive tri-service strategy for determining and allocating medical resources among MTFs. Consequently, neither we nor DOD can fully address the need for, or appropriate size of, NCA MTFs or MTFs elsewhere in the MHS. In the current health care environment, each service has its own needs determination and resource allocation approach. Generally, each allocates resources based on prior year budgets, facility size, location, historical workload, and readiness and political considerations. A tri-service strategy applied system wide would enable DOD to assess the need for each MTF by taking into account the resources needed for both readiness and peacetime care available at all

NCA MTFs. Also, resources available in the local civilian community need to be considered. Such a strategy would also provide a systematic basis for justifying budget requests.

A key obstacle to developing a tri-service strategy is the military services' long-standing independence. Historically, the services have had enough resources to maintain separate health care systems, with capabilities overlapping during peacetime. As a result, over the years, formal interservice management efforts have been limited and, today, remain difficult to achieve. A second obstacle is that DOD and the services have not determined the cost of MHS' evolving readiness mission or the cost of its peacetime care. Without knowing such costs, DOD is hampered in justifying MHS' size and defending the need for individual MTFs [Military Treatment Facilities]. Exacerbating this has been the emerging peacetime care emphasis during this decade — projected to continue in the next — which competed for resources with MHS' basic readiness mission.

... Studies during the period have identified deficiencies in medical personnel readiness. As a result, questions recur about whether MHS is too large; what the potential extent of service overlap and inefficiencies are among MTFs and if all are needed; whether more attractive alternatives to MTF care are available; and whether military providers are being placed and trained properly to manage readiness effectively.⁴³

DISRUPTION OF THE SYSTEM

The final argument the services have consistently voiced is that the disruption the system would sustain as a result of unification cannot be justified based on verifiable benefits of system reorganization. This is true. This argument is variably followed by a call for further study of the issue, or an assertion that the individual services in conjunction with DOD (Health Affairs) will form bodies (committees, councils, task forces) to improve coordination, standardization, and mutual planning.

As earlier review of fifty years of studies of the system showed, the MHS has consistently failed to do this to the satisfaction of Congressional overseers. The GAO report quoted above attests that, at least as recently as the end of 1999, the MHS had still not successfully achieved the desirable level of coordination, cooperation or standardization. That the individual service medical systems can and will achieve a satisfactory level of integrated function, while retaining individual service identity, is an assertion that rings hollow in view of past performance.

The dignified, responsible call for further study, repeated yet again within the last twelve months (three more studies are presently underway), has, in light of already interminable and largely ignored study, descended to bathos.

There are two other basic implications of the service arguments to address. The first is that unification will cause an unacceptable degree of system disruption. The second is that verifiable system benefits should be the basis for such a decision.

Debating what level of disruption would result versus what level of disruption would be acceptable is a fool's task, arguable endlessly in any of several directions and moving toward conclusions, the merits of which are ultimately unmeasureable. The only winning strategy is to recognize the fruitlessness of such a debate and, thus, not to let it germinate. Its relevance is marginal in the present case, as this report will now show.

The MHS is already in a high state of disruption. The downsizing resultant from the "peace dividend" of the Soviet collapse affected the MHS as it did the rest of the military. The system's uniformed numbers have diminished by approximately a third from its late 1980s size. Its quotidian workload, however, is not comprised preponderantly of readiness, nor of the care of active duty troops. The MHS workload decreased by less than ten per cent while its uniformed numbers diminished by roughly a third. During this same time, the DOD health care budget has remained flat, using an inflation adjustment calculated for all of DOD. Medical inflation, however, has increased at a greater pace than general inflation. Pharmacy inflation has been calculated in the American health care system to be eight to sixteen per cent for the last several years. Costs for the Federal Employees Health Benefits Program (FEHBP) rose by 7.2% in 1998, 9.5% in 1999, 9.4% in 2000, and are estimated to rise 10.5% for 2001 — nearly forty per cent in four years. New technology costs have skyrocketed and the demand for these new technologies has escalated. The DOD health care budget has failed to compensate for these and other legitimate cost increases, producing serious system stresses.

These stresses were substantially elevated by provisions of the 2001 Appropriations Bill, granting right of system access to retirees over the age of sixty-five and their dependents. This group (sixty-five and older), previously excluded from assured access to the military health care system, consumes roughly eighty per cent of annual health care expenditures in America in general and an even greater proportion of annual pharmacy expenditures. While this group is and has always been part of the military family, the requirement to fund their return to military health care without a supporting appropriation presents the MHS with a multi-billion dollar budget shortfall.

The move to a managed care model in the early 1990s produced disruptions in the MHS equal to those in the broader American health care system. The military system stood up TRICARE over a five-year period. Despite growing pains, and bugs in the system, the feat of installing a managed care model in a health care system of the size, distribution, and complexity

of the MHS is both extraordinary and unparalleled. It has not been without a cost in system disruption. And the changes engendered by imposing the TRICARE Lead Agent, regional system have been a disruption beyond the clinical disruption of imposing a managed care model. The MHS has undergone and continues to undergo a rapid acceleration of information technology upgrades and changes, a further disrupting force.

Much of this change has been demanded by Congress, orchestrated by ASD(HA) and driven by TRICARE — but implemented by the service medical systems and the major support contractors. Each of these answers to a different hierarchy. As might be predicted, this has led to different emphases and different processes. This has caused confusion, the appearance of disparities, differing timelines, and confusion about priorities and lines of authority. It can be readily argued that the existence of independent service medical systems has contributed to, not mitigated these problems.

There already exists a high level of disruption in the MHS. Some would argue that unifying the service medical systems into a single system would worsen an already complicated and disrupted situation. As has been pointed out, however, unification would mitigate some of the problems plaguing the system in its endeavors to change.

One may cure the disruption of a single system in a stable environment by bringing that system back to its baseline and again aligning it with the rest of the system. In times of more generalized disruption of the broad environment, however, attempting to hold an individual system at its historical baseline may doom it to extinction. Two general approaches may be taken. One approach is defensive — to fight for sustaining systems as one has known them. The second is to recognize the broader pattern of change and to use the ferment as an opportunity to re-order the system.

Failure to adapt to change in its environment is the hallmark of a species fated to extinction. While the MHS has used this disruptive time to advantage in its move to stronger business practice, its accelerated transition to better information systems, and its refocusing of clinical emphasis, it continues to hold a defensive posture with regard to organizational restructuring.

Requiring that the benefits of unification of the MHS be assured and verifiable is a certain means of preventing any possibility of unification. Setting this as the standard for embarking upon unification of the system presumes that such a standard is achievable. This presumes reliable referents to which one can compare both the system as it currently exists, and the system as it is proposed. While there are some referents in the civilian health care

sector, comparisons with these are inexact. Civilian systems are neither federal, nor do they have a readiness mission.

Beginning with approximations, extrapolations using straight lines to another model are certain to be even grosser approximations than the approximations with which one started. The resemblance of such a projected system to any eventual reality would be no more than chance. Even were the beginning approximations more exact, making such extrapolations requires that the systems being compared follow a linear model. Linear analysis is characterized by two clear and distinct properties, proportionality and additivity. Proportionality says that small changes on one side of the equation will induce small changes on the other side of the equation and that large changes on one side will induce large changes on the other. Additivity presumes that a complex equation may be broken into its component parts, that each of these may be analyzed and returned to the equation, and that the solution will be a simple sum of the parts. This property is the basis of the pervasive type of analysis with which we are familiar and most comfortable.

The flaw in this type of linear analysis is that we apply it to systems that do not obey linear properties. Systems that obey neither proportionality nor additivity are called, in mathematical terms, chaos systems. Chaos systems are distinct from linear systems in several characteristics. They defeat the property of additivity because the individual parts of the equation interact in unpredictable ways. Thus, understanding or quantifying individual parts does not predict how they will *interact*; therefore, simple summation of the parts will not necessarily achieve any reasonable approximation of the whole. Such systems for much the same reasons fail to exhibit proportionality. Small changes on one side of the equation may result in disproportionate changes on the other side — or large changes on one side may produce no perceptible change on the other side at all. Most critically, such systems are incredibly sensitive to starting conditions; so much so that it is impossible, in any circumstance but a theoretical one, to achieve exact duplication of starting conditions. Therefore within systems characterized by chaos mathematics, comparison with similar systems or even with the historical performance of the same system must yield unreliable conclusions.

Biological systems, geophysical systems, and many natural systems are ruled by chaos mathematical principles, rather than by linear principles, and thus are resistant to accurate extrapolation or prediction. "The fluttering of a butterfly's wings in Asia causes a hurricane in the Atlantic."⁴⁴

Complex systems, involving human response and biological variation, do not follow linear principals. Such, in part, is the basis for the small, over-numbered, under armed, cornered force achieving victory over its larger, better armed, and better positioned opponent.⁴⁵

Delineation of verifiable benefits of unifying the service medical systems will remain out of reach. Insistence that this be the standard for consideration of change is denial of willingness to take a reasonable, calculated risk.

The repeated calls by Congress and others to re-look the possible benefits of unification of the service medical systems question the sufficiency of previous responses. But whether the arguments against unification used for the fifty-plus years since the beginning of the unification discourse truly have a sufficient weight of logic to have prevailed during the Cold War is not the issue presently before us.

The unification debate of the last fifty years has played against a consistent set of background assumptions. The background has dramatically changed. This report has endeavored to show that the most common and repeated responses of the services to the recommendation of unification have notable flaws. Some of the responses have merit in senses that are limited by time or perspective, but even against the background of the Cold War, emotion and parochialism characterized these responses more than did solid reasoning. The issue here, however, is not the debate of the past, but rather the context of the debate for the future.

THE CASE FOR A CHANGED LANDSCAPE

“Between now and 2025, the national security environment will be fundamentally different from the national security environment of the Cold War era.”⁴⁶

“With the collapse of the Soviet Union along with the implementation of the Goldwater-Nichols DOD reorganization Act of 1986, and the shift to an information and knowledge based society, the assumptions that had served so well for nearly 50 years now increasingly appear to be obsolete.”⁴⁷

The President’s National Security Strategy for a New Century lists as threats to U.S. Interests: Regional or State-Centered Threats, Transnational threats, Spread of dangerous technologies, Failed states, Foreign intelligence collection, and Environmental and Health Threats.⁴⁸

“...Such an...operation required ‘different techniques’ because we are in a different ball game today.”⁴⁹

The statements above speak to a widely accepted reality. The global security landscape has changed. What are these changes and from what are they wrought? Our singular, peer antagonist collapsed over a decade ago. The military might of the United States has no peer. Our nation cannot be seriously challenged militarily by frontal assault. In the recent words of an Army flag officer, "no one wants to stand toe to toe with us."

The collapse of the Soviet Union perhaps less unleashed than it uncovered a vast wave of ethnic and religion based conflict. The Baltic States were early out-of-the-chute in asserting their independence. The breakdown of the former Yugoslavia is an obvious example at a bloodier level, with ethnic assertions of the Croats, the Serbs, and the Albanians, and with ethnic passions further inflamed by religious enmity between Muslims and Christians (or even between Christians and Christians — Eastern Orthodox versus Roman Catholic). From Bosnia-Herzegovina and Kosovo to Afghanistan and Chechnya, ethnic/religious strife continues to cause conflict, death, instability and social and economic chaos in the former Soviet Union.

Africa provides more examples: Rwanda, Somalia, Eritrea, the Congo and others. Latin America and South America provide yet further examples. In Africa, issues of ethnic/religious conflict are compounded by epidemic disease. In Latin America, South America, Russia, and other parts of the world, drug trafficking and organized crime compound government instability. There are tensions in Asia, on the Korean Peninsula, and on the Indian Border with Pakistan. In these areas and others, the dangers of escalating tension are worrisomely heightened by the possession of nuclear arms. In all of these areas, economically disadvantaged and sometimes starving populations add immeasurably to the complexity of finding even partial solutions, while those same impoverished conditions generate escalating environmental and health threats.

Through the Cold War, mutual assured destruction by the United States and the only other major nuclear power actually provided a level of stability and security against conflicts that might threaten to escalate to the unimaginable. Now, instead of a single nuclear threat to the U.S., nuclear proliferation has added steadily to the number of nations that might consider an indirect or direct act against the United States. A panicked, world-destructive, escalation to a massive U.S./Soviet strategic exchange is now less likely to be incited by a regional aggression. In the post-Cold War era, there are nations who, by malicious intent or carelessness, pose a greater threat to U.S. security than any in the latter half of the 20th Century. While the likelihood of a massive nuclear exchange has diminished, the possibility of nuclear terrorism on American soil has increased.

Apart from nuclear weapons, our continued sanctions against Iraq are confirmation of America's concern over the threat of weapons of mass destruction. As terrorist tools, these

weapons have perhaps even greater potential for threat on home soil than do nuclear weapons; nuclear devices, as devastating as they may be, are ultimately limited in their capacity for destruction. The twelve dead and the five thousand injured in the Tokyo subway in 1995 highlight the immediacy of the chemical and biological threat; the mounting evidence of weaponized infectious agents is irrefutable.⁵⁰

We defined threats to vital interests up to and through the Cold War largely in terms of hostile nation states. Threats to the United States in the third millennium are not so neatly circumscribed. In a well-conceived piece in the Autumn 2000 issue of *Parameters*, Paul Smith states that ". . . five broad categories of transnational challenges pose the greatest threat to human security, national governance, and, ultimately, international stability. These include transnational crime, transnational terrorism, international migration flows, disease and international pandemics, and global environmental degradation and climate change."⁵¹

The lack of ability to define threats in terms of nation-states imposes challenges we did not face during the Cold War. Nation-states have policies and characters that are both defined and public. While states may not adhere to their published policies, their definition as *states* circumscribes the range of actions they may take unless they wish to become *rogue states*. The benefits of membership in the international community limit the range of acceptable actions of any nation. Transnational threats, however, are typically driven not by nation-states, but by *non-state* actors or by global circumstance. In the former case, non-state terrorists, smugglers, or international criminals may create threats to our vital interests (e.g., drug smuggling, the bombings of the Federal Building in Oklahoma City and the Trade Towers in New York). The moral standards or legal norms that limit the actions of nation-states do not bind these players. Their lack of clear geographic restriction and of a defined infrastructure makes them difficult to defend against and difficult to attack. The U.S. retaliation for the embassy bombings in Africa clearly demonstrates the difficulty.

Our missile attacks in Afghanistan and Sudan drew limited support from some allies, silence from others and condemnation from a host of non-allies and putatively neutral nations. Many viewed the targets as dubiously connected to the perpetrators of the embassy bombings and viewed even the U.S. identification of the perpetrators as dubious. Attack on non-national interests on another nation's soil raises its own moral and political issues regarding sovereignty and damage to national assets or collateral threat to their populations.

While the missile attacks in Afghanistan and Sudan were impelled by specific, defined acts, response is even more problematic when the threat is by an entity even vaguer than a terrorist organization. Such is the case concerning military action against criminals or drug

traffickers. Such problems are ongoing but the immediate threat is not compelling; neither is there, typically, a single event sufficient to capture the public imagination and, thereby, to generate a foundation of public support for decisive or sustained action.

Threats to U.S. vital interests without a malicious progenitor and with causes difficult or even undesirable to control further complicate the new security landscape.

Disease outbreaks are occurring throughout the world with unsettling regularity. In September 1994, for example, the world was alarmed by news of an outbreak of pneumonic plague in Surat, India. The international response was swift as governments around the world attempted to seal their borders against travelers from India. A few months later in Zaire, an outbreak of the Ebola virus killed at least 59 people and sparked a similar international response. In 1998, dengue fever, a common and potentially deadly tropical disease, reached epidemic proportions in Indonesia and Thailand. In March 1999, Zimbabwe was overwhelmed by a major cholera epidemic, which some experts blamed on urban overcrowding, among other factors. Malaria, a disease spread by mosquitoes, is common in Africa, South America, and Southeast Asia, and is spreading to higher elevations and potentially infecting more people because of the effects of climate change. Tuberculosis is another infectious disease that kills hundreds of thousands of people annually. In Africa, more than 1.6 million new cases of tuberculosis occur every year, making it the most deadly infectious disease in the country.

Perhaps the most insidious and destructive infectious disease is the Acquired Immune Deficiency Syndrome (AIDS) epidemic. In April 2000, the Clinton Administration formally designated AIDS as a threat to the US national security, one that could "topple foreign governments, touch off ethnic wars, and undo decades of work in building free-market democracies abroad.⁵²

The concentration of the world's population in urban centers contributes to the problem of generation and transmission of infection and heightens the risk of epidemics or pandemic. Estimates are that by the year 2025, fifty-nine per cent of the world's population will live in cities. A population more and more mobile on a global basis increases the threat of disease transmission and pandemic.

The steadily escalating crowding of the world's cities puts unsustainable pressure on their infrastructures, their health resources, and their economies, and threatens the stability of governments hard-pressed to cope with these problems. The failure to cope with these problems, as has been seen in any number of places in the world, generates population migrations that, not infrequently, heighten ethnic, nationalistic, and religious tensions.

Environmental degradation is often accelerated in third world countries fighting for a piece of the global economy. Fledgling economies must rely on raping natural resources and slightly more advanced economies find outdated and polluting industrial technology to be more accessible and affordable than those technologies that are more environmentally viable.

Environmental problems inherently ignore national borders, and the problems they spawn respect neither poor nor wealthy nations. The availability of fresh water for agriculture, industry, and basic population needs is a problem one needn't leave the U.S. to confront. California is fighting with its neighboring states over water rights to the Colorado River. The U.S. southwestern states are currently negotiating with northern provinces of Mexico over water rights to the Rio Grande. Water rights, a spur to conflict throughout history, are assuming ever greater importance as populations swell and concentrate, the environment degrades and the global climate changes.

Speaking of the global security landscape that the Clinton Administration found upon its assumption of power, the National Security Adviser commented, "The maps for dealing with the world that were left behind for us were obsolete. We knew for 50 years what we had to be against — in the context of the Cold War. Now we had to figure out what to build."⁵³

The MHS 2025 report to the senior leadership of the MHS states,

" . . . assumptions valid during the Cold War at the industrial era . . . do not fit an information age future where the greatest threats to national security are likely to be from chaos, breakdown, and increased technological complexity, not another coherent military force. . . . The most critical challenge will be preventing chaos, not winning wars against other sovereign nations. Protecting national borders will be less central than protecting against threats to common security, such as arms proliferation, environmental-economic breakdowns, and spreading intrastate conflicts.⁵⁴

The evidence is overwhelming that our national and global security picture has radically changed since the debate over MHS consolidation was first taken up. From the single, defined, known, geographically, economically and politically stable antagonist we faced in the Cold War, we have moved to the requirement to face multiple, unclear, unknown, transnational, economically unstable, and politically volatile threats. The Army Chief of Staff's drive to transform the Army bespeaks a recognition that answers that served against a Cold War background, will not serve against the global landscape of the new millennium.

HAS THE MILITARY HEALTH SYSTEM CHANGED WITH THE LANDSCAPE?

THE WAY IT WAS

We think of major organizations as having a deliberate structure. In many cases, they do not. The two Hoover Commissions' massive undertakings were directed at precisely this problem. The Executive Branch of the Federal Government had grown huge, unwieldy, and

inefficient. Its growth had not reflected a deliberate, coordinated, and integrated plan but responses to a series of responsibilities placed upon it or that it had assumed.

As the commissions pointed out, many agencies performed the same or similar functions. Many similar agencies or departments were not grouped together. Some departments and agencies directly competed with one another, either to capture business from a limited pool, or worse, to undo what another agency or department had done. Lines of responsibility and authority were confused. As a result, accountability was either weak or totally lacking. The lack of accountability induced poor quality, inefficiency, waste or, worst of all, failure to achieve the purpose of the agency's or department's existence.

The last major reorganization of the Executive Branch of the federal government dates to the Hoover Commissions. While the lessons of the Hoover Commissions might have produced in Congress and in the White House an intent to expand federal services, with greater attention to maintaining integration and efficiency, such has not been the case. The reasons for this are many and may largely be deduced by reflection on the political process.

The nation has had fifty years since the Hoover Commissions to add agencies to serve legitimate needs. But these additions have been made without a plan and without review of the roles, missions, best location and best structure for those agencies. In an opinion piece entitled "Reinvented but Still Redundant," the former Secretary of Commerce, William M. Daley, highlights specifics of the overlap and the disjunction of the agencies that have been regularly added to the federal government. He calls for what amounts to a new Hoover Commission to do what the Hoover Commissions did in the late 1940s and early 1950s: review and rationally reorder the functions of the Executive Branch in view of the current state of the national and global landscapes.⁵⁵

At the end of the Second World War, the Army Medical Department discovered within itself a situation similar to the semi-random organization of the federal government. Activities had developed to answer specific needs in specific locations. In some cases, the same need had been met in multiple locations but the processes and organizations developed to meet the need had developed independently and thus differently. Medical personnel had undertaken functions outside the medical realm to fulfill needs: ". . . the Medical Department . . . structure revealed the duplications and anomalies of an organization that had 'just growed' and to a giant size at that, subject to many pressures amid the changing needs of war and peace."⁵⁶

It would be untrue to imply that no planning or deliberation has gone into the organizational structure of the MHS. It is also clear that organizational structure in large, durable organizations evolves to a considerable extent, without plan.

Medical support in the earliest decades of the U.S. Army was isolated, variable, limited in capability, and autonomous. It paralleled the genesis of regimental and smaller units of the time. It was part of local militias and, even when those militias temporarily amalgamated into larger military units, medical support predominantly served the unit to which it was organic. The term "general" with respect to medical facilities or medical officers (general hospital or general medical officer) initially implied medical service to soldiers *regardless* of their unit affiliation.

Advances in transportation and advances in medicine and surgery allowed the advent of centralized medical structure. In a self-sustaining process, the collection of broad lessons of war injury treatment furthered the science of surgery and medicine, making treatment in centralized facilities, where such lessons were being applied, more desirable. The development of ambulances, rail, and steamship travel allowed the collection and transport of patients to centralized — now more desirable — facilities, for extended care, thus further enhancing the concentration of knowledge about injury, disease and its treatment. Echelons of care were determined by the nature of injuries but equally by the possibilities *and the limitations* of transportation.

WHY IT WAS THE WAY IT WAS

To return to the original point, the evolution of organizational structure in large, durable organizations is impelled by perceived *need*. The form organizational structure takes is inspired by the *vision* of possibility but *constrained* by expediency.

To create an example: if transporting a wounded soldier from the battlefield confers no benefit in decreasing his eventual disability or his likelihood of death, there is no *need* for an ambulance. The *need* for a means to transport him arises when medical advances make the likelihood of decreasing death or disability greater if the wounded soldier can be transported to an area where he can receive services. The ability to transport him immediately and without risk is the *vision* of the ideal, but that vision is *constrained* by reality. The development of a field ambulance is physically and fiscally *expedient*. Organizationally, we create, at this point, ambulance units and begin to train those who will operate and maintain them. They become part of our organizational structure.

If the need for transportation of the wounded is recognized and effected in a number of different places at the same time, ambulance units might develop in a variety of ways; the vision and the expedient product might differ. Ambulance units might attach to operational units at different levels or they might attach to a central medical unit and not to operational units at all. Both systems might develop simultaneously and functionally either compete or overlap. The

organization might let the overlapping functions persist, might eliminate all but one system or might consolidate them.

To continue the example, we might conceptualize the development of teleportation technology. Transportation of the battle-wounded would then be via putting them in a portable teleportation bubble to transport them at light speed to definitive care. The need for ambulance companies would be eliminated, but that doesn't mean they would go away.

Sections of large organizations (and organizations themselves) find reasons to perpetuate themselves beyond the disappearance of their original function or their role's assumption by another agency. Examples are endless. The preservation of tradition plays a role; self-interest plays a role.

This report has displayed the process by which, historically, the organizational structures of the service medical systems and the overall MHS were established. The organizational structure was created — as in all temporally durable organizations — by a process, less of planning and deliberation, than of reaction to circumstance. The MHS has, periodically, made changes to its organizational template. The ongoing debate and the flood of committees, task forces, panels and commissions argue that the changes have not been sufficient to appease the MHS' Congressional overseers.

The repeated findings of all major evaluations of the system continue to be that a unified military medical command would benefit both the peacetime health care delivery mission and wartime contingency planning and deployment. Assertion that the service medical systems have succeeded in achieving an acceptable level of cooperation, coordination, and standardization begs the consistent conclusions of numerous studies spanning fifty years.

This report has cited clear, real examples (the Executive Branch of the Federal Government-Hoover Commission, the Army Medical Department at the end of WW II, the Executive Branch of the federal government in 2001) of this type of organizational evolution and its potential to cause dysfunction or inefficiency. Organizations may defend themselves against ad hoc expansion by careful scrutiny and control of their development or by periodic review of their structure and organization with elimination or consolidation of redundant or outmoded function. This is a painful process, as anyone involved in recent Base Realignment And Closure (BRAC) actions may tell you.

The foresight and discipline to expand deliberately is not given to many organizations. Even those to whom it is given need to periodically assess their structure relevant to changing circumstance. An organization's failure to periodically reassess and realign itself leaves it at the best, at risk for inefficiency, and at the worst, for irrelevancy.

IT STILL IS THE WAY IT WAS

The nature of large, durable organizations and the nature of forces that drive their evolution have not changed. The natural progression of growing organizations toward inefficiency, redundancy and service to outdated roles has not changed. The level of pain in looking at and deliberately excising those parts of an organization that have no role for its future has not changed. The institutional pain of re-making the remaining organization has not changed. *What has not changed* is the understandable reluctance to endure the pain of change.

The arguments for and against unification of the service medical systems have not varied greatly since first broached in the 1940s, nor have the inducements to consider reopening the debate. These inducements have fallen into three broad categories: a shortage of qualified personnel (usually physicians), perceived inefficiency (usually escalating cost), or perceived inability to meet mission — either readiness or peacetime health care expectations (perceived ineffectiveness).

The debate, when first joined in the late 1940s, was induced by a perceived over-expansion of military medical, physical-plant capacity — a result of the Second World War — coupled with an anticipated shortage of physicians. There was also a belief that the lack of coordination of medical support in the early part of the War, especially in the European Theatre, had hampered the effectiveness of medical efforts. Though this was somewhat rectified by inter-service cooperation in the later part of WWII, Major General Norman Kirk, the Surgeon General of the Army, and others saw a critical need for better coordination of planning and execution of medical support in combat.

While others used the looming physician shortage to argue for unification, the Air Force medical leadership used the same physician shortage as an argument for a separate Air Force Medical System. They argued that the Army Medical System had an inadequate number of physicians to meet the Air Force's needs and that they would have to recruit their own.

Throughout the more than fifty years of debate and reports on military medical unification, the most consistent driver has been the perception of inefficiency and fiscal waste. Other perennial concerns have been sparse human resources and doubts that the system can execute one or both of its statutory missions — readiness and peacetime health care.

Almost every report has noted overlap of services; sub-optimal use of highly specialized but sparse personnel; inconsistency of process, measurement, and organization among the three service medical systems; lack of coordination of policy and future planning; lack of coordination of deployment planning; and unwillingness of the service medical systems to

cooperate with each other (some reports have noted not only a lack of cooperation, but actual competition). Virtually every report has averred that some form of strengthened central authority would benefit the efficiency of both statutory missions of the MHS. The vast majority of reports have recommended some form of a unified MHS. Nearly all have said that failure of incremental measures to achieve goals of increased coordination and efficiency should impel Congress or DOD to re-visit the issue of unification. The nearly consistent position of the service medical systems has been counter to the call for unification. As earlier developed, the services have forwarded a consistent set of arguments against unification.

The counterpoints advanced by the services have been: the importance of individual service identification by both health care providers and their patients; the differing cultures and traditions of the services requiring service-specific health care personnel who understand the culture and mission of the service; the lack of verifiable data supporting cost savings from unification; the lack of verifiable savings of administrative, managerial, and clinical personnel from unification; that the objectives of unification can be achieved by measures well short of unification, by increased collaboration and coordination among the three service medical systems; and the severe disruption that would be caused by major organizational realignment.

Arguments on both sides of the debate were shaped against the background of the Cold War. The existence of a large standing federal, military was itself a product of the Cold War and had not occurred prior to WW II. From that time until the fall of the Soviet Union, a stable set of perceptions and realities dictated our national security posture and the background for the debate.

We had only one compelling adversary, the Soviet Union.⁵⁷ The overriding tenet of our strategy was the containment of communism. Though China, as a communist state was subject to this strategy, it was not viewed as a peer competitor. The Soviet Union was. Our security activity was geared toward maintaining parity with, or superiority over, the Soviet Union in both nuclear and conventional forces.

Though we understood the possibility of civilian devastation by an all-out nuclear exchange, the idea of mutual-assured-destruction prevailed and as long as our nuclear arsenal remained current, such an exchange seemed divorced from reality. We maintained, refined and expanded our strategic nuclear forces. We created tactical nuclear weapons on a limited basis. We created both of these with the hope and expectation that we would never use them.

Our conventional forces remained structured on the pattern that remained from the two world wars. Our conventional planning focused on a Fulda Gap-type scenario. This scenario depicted Soviet Conventional Forces massed on their side of the Fulda Gap. Their armor and

infantry would be pitted against our armor, infantry, and anti-tank weapons in an action calculated to slow their flood through the Fulda Gap long enough for the U. S. and its allies to mobilize and deploy the necessary additional conventional forces to halt and reverse the attack. This scenario used WW II tactics and — with some technical upgrades — WW II equipment. It dominated doctrine and training until after the Gulf War.

The imagined, conventional battlefield of the Cold War Era was little different than the battlefield of WW II. Battle would be low-tech and high casualty. The weapons and expected injuries would be as had been seen in WW II and Korea (to a lesser extent, Vietnam). Medical doctrine, triage, care, and echeloning would be largely unchanged from WW II. The focus of military medicine would be combat service support. The focus of any conflict between the two super-powers would be their militaries, not civilian populations. Conflict would be symmetric. The Soviet Union could field a large force with conventional equipment. We would match it (technically though not numerically) and struggle with them for ascendancy. Border and territorial integrity would be our objective (and the objective of our allies). Our perspective would be national.

Operations less than full combat were an annoying distracter from the larger purpose of our military. Nations other than the Soviet Union were viewed either as allies of one of the two major players — the United States and Russia — or as inconsequential. Our tolerance for other nations' affront to our sense of justice and egalitarianism was heavily tempered by the high necessity of containing communism. Our willingness to shed the blood of our sons and daughters was reinforced by our belief in the great threat posed by our singular adversary.

Against this background, arguments of unnecessary disruption, of the importance of service identity, of service cultural and mission differences, and of the need for service specific medical systems held sway. Major reports repeatedly proclaimed the desirability of centralized control, planning and accountability; yet those same reports repeatedly noted the continued lack of effective cooperation and collaboration of the service medical systems.

STILL ORGANIZED FOR THE COLD WAR

The MHS has grown over two hundred years. Though it has made periodic adjustments in its structure, it still has vestiges of form and of conflict that were developed in its earliest evolution. The Cold War dominated foreign and security policy for the last half of the Twentieth Century and military organization and systems were driven by the Cold War perception. The MHS organization was appropriate for the era. As the massive overhaul of the Army now under

way attests, the Cold War structure is not suitable for the challenges of the new century. The MHS is still organized largely as it was in 1949.

The purpose of this report is not to validate or dispute the choice of independent service medical systems in the Cold War Era. The purpose of this report is to establish that the post-Cold War Era is substantially enough different to require reassessment of the question of service medical system unification.

HAS A NEW CONTEXT CHANGED THE DEBATE?

A CHANGED MISSION

The likely future threats to U.S. interests have been identified in numerous documents and forums. While the forums have been diffuse, their conclusions correspond well.

There is little likelihood of a symmetrical conflict with a military peer.⁵⁸ We will live in a complex world, increasingly enveloped by technology but with ever-greater disparities between "haves" and "have-nots." Conflicts in which the U.S. engages will be high tech, asymmetric, and low casualty. Forces generating chaos will include more rampant terrorism, economic disruption, concentration of population with breakdown of urban infrastructure, environmental catastrophe, natural disasters, and weapons proliferation (conventional, chem/bio, nuclear). Our enemies will be less clearly defined. They will focus less on assaulting our military and more on assaulting our civilian population.

It follows that "the most critical challenge is [will be] preventing chaos, not winning wars against other sovereign nations"⁶⁰. Military operations other than war (MOOTW) will become (perhaps have become) the predominant operational focus of the military. Given the most likely threats to the U.S. in coming years, the MHS should focus less on combat medical support and more on the types of MOOTW in which we are and will be engaged. This would include humanitarian aid in event of natural or man-made catastrophe, assistance in disease outbreak or infrastructure collapse, nation-building by medical infrastructure assistance, civil support, and support of peacekeeping operations.

Table 3 depicts some of the contrasts between the Cold War and 21st Century environments.⁶¹ Unfortunately, no similar display could lay out corresponding contrasts between the Cold War MHS and the MHS that exists in the early 21st Century.

COLD WAR	EARLY 21 ST CENTURY
Bipolar world—simple	Multipolar world—complex
Winning wars	Preventing chaos
Soviet Union is U.S. peer competitor	No peer competitors capable of mounting broad strategic challenges
War between sovereign states	Intrastate wars; terrorism; conflicts with guerilla groups, paramilitary, drug cartels, and organized crime
Symmetric conflicts (e.g., tanks vs. tanks)	Adversarial use of asymmetrical means
Low-tech, high casualty wars	High-tech, low casualty conflicts
Military is target of conflict	Civilians are target of violence
Preparations geared to global war with the Soviet Union – more recently, to two near simultaneous major theater wars (MTW)	Global war unlikely; scope and scale of threat diminishing in most areas of potential regional conflict; proliferation of unconventional threats
Deter communist aggression	Shape world events to foster peaceful, sustainable development leading to human security
Protect national borders & territories from foreign nations	Protect against threats to common security: 1. Arms proliferation 2. Conflict & disorder spreading & disrupting global economy 3. Environmental catastrophe 4. Crimes against humanity 5. Natural disasters, etc.
Military Operations Other Than War (MOOTW) hurt and detract from the central mission of deterrence	MOOTW are critical for shaping world events responding to the full spectrum of engagements
Willing to increase inequalities, support dictators to prevent spread of communism	Need to promote fairness and encourage democracy to address grievances that can lead to terrorism and chaos
Medical resources for combat support	Medical resources (also) as a fundamental asset for achieving national objectives

TABLE 3: The Changed Environment

The current configuration of military medical forces is well structured to support peacetime health care. Military combat support, always considered the primary mission, is less well facilitated by the current organizational structure and is likely to be more poorly supported still without a change in organization. Missions such as MOOTW were not even considered in designing the current organizational structure of the MHS. The Executive Summary of the MHS 2025 Report to the Senior Leadership of the Military Health System opens with the statement; “This study has one overarching conclusion: the MHS must transform itself into a very different enterprise to succeed in the changing world of the early 21st century.”⁶³ The Executive Summary goes on to say:

“There were reasonable grounds in the past for having separate medical departments in each of the military Services, related primarily to the uniqueness of the hazards to the health of their members, the different environments in which care is provided, and the differences in Service culture. However with the

implementation of the Goldwater-Nichols Act, the fall of the Berlin Wall, and the changing strategic environment, the Services themselves are becoming more and more joint in their operations. As we become more joint, only a small minority of medical issues is proving to be Service-specific, so that separate medical departments are proving unnecessary at points in the evacuation chain where definitive medical capacity exists. Today four different military health bureaucracies act independently and often with little coordination, resulting in an oversupply of medical capabilities in some areas and too little supply in other areas. A joint structure could align and coordinate efforts, better matching the supply of medical capabilities to the current and future demands.⁶⁴

Constructing a detailed, new, organizational model for the MHS exceeds the focus of this paper, yet several general conclusions regarding such an organization seem inescapable. The arguments used in the past to support the maintenance of individual service medical systems cannot be rationally sustained against the new background. The requirements of jointness have obviated service operational uniqueness to the point of making independent planning by individual service medical systems unnecessary. The continued lack of integrated training, doctrine, process, and planning would portend deployment strategies that are fragmented and at greater risk of under or over-deployment, or worse, of failure to accomplish mission.

In a conversation with an Army Medical Department Flag Officer knowledgeable about medical support in the Gulf War, it was clear that the planning factors used in estimating support requirements for combat deployment were poorly grounded in current reality. Estimates were guesses. The tendency was (and is) to overestimate — the worst case contingency. While no planning can account for the vicissitudes of combat, requirement estimates based on a graded response and a fully integrated evacuation system might allow a smaller in-theatre medical footprint. This is highly desirable given the criticality of current airlift capacity and the logistical demands of any excess deployed personnel.

This general officer was also personally aware of instances in which medical personnel of one service refused medical support at times to members of another service. This occurred in situations where planning problems had left a local shortage of routine medical services.⁶⁵

Discussions with Army Force Development officers and Air Force senior medical personnel corroborated the above observations. The determination of combat medical support requirements is currently a guess, subject to substantial over- or under-estimation. In the Gulf War, the Air Force medical planners basically said “send everything.” By the time all requested medical assets were in place, it was clear that the number of Air Force medical personnel in theatre exceeded requirements.⁶⁶

Such problems stem, in part from the lack of any requirement for interservice coordination of medical support planning. The CINFOR CONPLAN: INTEGRATED CONUS MEDICAL MOBILIZATION PLAN specifically states: "Each service will retain responsibility for the medical support of its respective forces."⁶⁷

The creation of a unified MHS would give the war-fighting CINCs a single responsible individual to turn to for medical support. Were this single responsible individual a special command CINC, his obligation to participate in regular war-fighting exercises would force the development of integrated medical planning, deployment, and medical mission doctrine. This would clearly better serve the needs of the war-fighters.⁶⁸ The first recommendation of the MHS 2025 report acknowledges the urgent need for this change: "Totally refocus MHS energy and resources, recognizing the unified military Commander in Chiefs (CINCs) as the primary customer . . ."⁶⁹

The MHS is presently configured for combat support, not support of MOOTW. To support diverse missions of the types likely in the coming twenty-five years will require operational structure that is easily reconfigurable or modular, yet which is well integrated from the forward area of deployment all the way back to the CONUS supporting base.

During the Cold War, the medical readiness mission was to provide for the health of deployed soldiers, sailors, marines and airmen and to treat casualties of combat. This mission was fixed, regardless of geography. In the 21st century, the scope of missions will be broad. For support of line troops deployed in less than full intensity conflict or MOOTW, the threat and the medical support requirements will vary dramatically depending on the area of the world and the mission.

Missions in the current quarter-century will be weighted toward promoting stability and preventing chaos. Factors that will generate instability and chaos include natural events (drought, flood, disease) and human conflict. While the latter may directly involve our combat forces, the developing pattern is for our military to serve as a mitigating influence in conflicts that do not directly impact on our vital interests. Both natural events and human conflict have in recent years (and historically) caused significant population migrations. The influx of new populations may provoke further conflict, but at the least creates health and economic threats and is a burden to infrastructure. In many of the crises that will arise, dominant threats will include the risk of disease, the risk of malnutrition, the risk of overwhelming the basic infrastructure (water systems, sanitation systems, public health systems, food production systems, food distribution systems), and the risk of contagion or epidemic. These types of threats will require the assessment of medical infrastructure, the assessment of medical and

disease risk (for both the index population and for our military forces), and the supplementation or creation of medical assets to counter the health threat.

The probability of this type of scenario is increasing. The larger military must revise its perception of medical forces, from a view of medical assets as strictly combat service support for combat troops, to a recognition that medical forces, rather than combat forces, may in some situations have the dominant role in promoting stability and avoiding chaos.

For operations in which medical personnel have a primary role, knowledge of the regional environment, health, and infrastructure issues will be vital to a rapid, safe, and correct response. Foreign area medical specialists will become critical.⁷⁰ We have few or none in the current inventory. The MHS has no formal vehicle for the training of such specialists. The history of the service medical systems is to compete or overlap in developing new function. Missions of the type above are likely to develop within the purview of the geographic CINCs. At present, the geographic CINCs may call on the combat forces of an individual service. There is minimal overlap in combat forces. For medical force needs, however, the CINCs have no single, unified source for either the assessment of medical factors or for the supply of medical forces. The model for medical forces — really a variation on the organic assets of Revolutionary War regiments — still views medical forces only as support for combat troops.

The evolving ascension of medical/health intervention as a deterrent to instability and chaos will require a responsive, integrated medical force with capabilities honed to more than just the treatment of battle casualties and disease-non-battle-injury. Given the likely importance of the military medical role in the success of the geographic CINCs, the creation of doctrine and training and the supplying of medical forces for future missions deserve unified execution.

A CHANGED ATTITUDE

There remain issues that would not be directly addressed by the creation of a unified command. The mission duality problem is such an issue. There are proponents of maintaining a military health care system focused on operational support with peacetime health care truly being a secondary mission — one that could be largely divested to the civilian sector. There are others who focus on the peacetime health care mission. The peacetime health care requirement garners considerable scrutiny due to the ninety per cent of the annual DHP Budget it commands.

The mission duality issue should be resolved. Numerous reports have concluded that the two missions are inextricably linked. The compulsion to assign ascendancy to one or the other of them implies that either one should or could be ignored in constrained situations. This is

not now a defensible perspective. (It probably never was.) In reality, no medical professional or any politician would argue that peacetime health care should suffer if required for military readiness or that military readiness should suffer for the sake of peacetime health care.

The perception of medical care as a critical right makes any interruption of the non-active-duty beneficiary benefit unacceptable. The logical extrapolation of an argument for ascendancy of the combat support mission over the peacetime health care mission is that care of a soldier who sustains a gunshot wound in combat is more important than the treatment of the soldier's child for injuries suffered in a car accident. The public expectation is clearly that both the soldier and his child will be cared for effectively and without delay. This highlights a critical issue. While the most consistent focus of Congress over the last fifty years has been efficiency, the issue of efficiency presupposes efficacy. No matter how far the cost of the system may be driven down, its value approaches zero if it does not succeed in achieving its obligation. The system has two obligations — combat service support and peacetime health care. Failure at either mission, for however brief a time, is a breach of efficacy which collapses any consideration of the issue of efficiency.

Changes in the public perception of health care and changes in the public perception of the military drive a need to deal with this issue differently than in the past.

Health care is no longer a service that Americans are willing to defer. Access is critical to the perception of a medical system. While a major combat contingency might induce military beneficiaries to suspend service expectations for a time, the American perception of health care as a right and a requirement would not tolerate prolonged suspension or denial of services.

The CNN-style visibility of combat operations also requires that the American public feel satisfied with the immediacy and sophistication of combat medical support and follow-on care. The debacle created by a perception of inadequate sophistication, and insufficient resourcing of prosthetic treatment for amputees in the Gulf War, highlights the standard to which the public holds the MHS. The immediate visibility of combat and the American public's response to it have added a major factor to operational planning. The support of the public for hostile action in support of U.S. policy may no longer be taken for granted. What they see on TV is a major influence in winning or losing that support. Their satisfaction or dismay with the medical element of what they see heightens the emotional response. We are all affected by human suffering; we are most affected by human suffering that we view as unnecessary.

America is willing to allow the blood of our sons and daughters to be shed in hostilities viewed as directly defending American sovereignty. Americans are less willing to shed that blood in missions viewed as unnecessary to our vital interests. The watershed for this change in

public standard was Vietnam; its demonstration was Kosovo. Clearly, operations in Kosovo were developed around the need to assure that Americans would not die in the conflict. Ground forces were held away from direct contact. The President, to the dismay of some military planners but as a reassurance to the American people, publicly stated that we would not engage our ground forces in direct fighting. Even our helicopter gunships, though poised and waiting, were prevented from entering the combat area for fear of the public reaction to the death or capture of a shot-down pilot.

These changes in American perceptions of acceptable health care support, both for themselves and for troops sent in harm's way, require an adjustment in the MHS approach to dealing with the breadth of statutory requirements. The continued separation of the two missions in the thinking of policy makers creates contentions that ought not exist, and leads to policies favoring one mission or the other that cannot be defended. Any policy that trades off one of the fundamental MHS missions against the other will always be found wanting.

Despite repeated calls over fifty years for greater coordination, greater consistency, greater standardization, and greater cooperation among the service medical systems, the imperative for unification could be and was denied against the background of the Cold War. There is no reasonable doubt that the strategic and security landscapes have changed since the Cold War's end. We ignore the implications of this for the MHS at our peril; and at the peril of our sons and daughters.

WHO WILL WIN? WHO WILL LOSE? (WHO WILL RESIST?)

Unification of the MHS would inevitably displace a variety of people. Those at the tops of the individual service hierarchies would find themselves subordinated to the command structure of a unified MHS. Those who currently exert command and control over the service medical systems would see that command and control transferred to a unified medical command.

Each of the systems currently vies with each of the others, cooperating when advantageous or unavoidable, and going their own way as they develop individual visions for their futures. While the most visible of these systems are the three service medical systems, there are in fact four systems or even five. ASD(HA) is not directly connected to any of the service medical systems. While ASD(HA) promulgates central, system-wide policy, the current system allows individual service implementation of that policy, in essence allowing the services their own interpretation of the weight and direction of those things that are centrally mandated. In essence, this allows a service to ignore or avoid the intent of policy toward which it

disinclines. Recognizing this, ASD(HA) and its field operating agency, TRICARE Management Activity, do not publish policy without first staffing it through the services. Anything an individual service finds objectionable in central policy is removed before it is published. This avoids any public demonstration of the weakness of ASD(HA) or TMA, but frequently results in weak or ineffectual policy.

The unification of the service medical systems would create a struggle by each of the current service systems for dominance of the new, unified system. The struggle would include the three service systems as well as ASD(HA). A fifth system is the network of civilian medical administration that was created with the advent of TRICARE. Billions of dollars are at stake for the multiple vendors who serve as major contractors for the TRICARE system. While DOD and the service medical systems could be dictated to by Congress, the large financial stakes in a major reorganization of the MHS would garner the interest and activity of the major contractors. Even contractors other than the major support contractors would be obligated to re-negotiate contracts with a larger system. Where different vendors served different systems, consolidation would reward some and displace some. Even for those who won, the larger system might be able to negotiate with greater leverage. The civil sector pays careful attention to Congressional action regarding the MHS.

This would be only one of the influences brought to bear on Congress. The last round of Base Realignments And Closures (BRAC) displaced or dismissed federal employees. Base closures also removed access to services (PX, commissary, medical) for those beneficiaries living near a closed base. Powerful advocacy groups represent these federal employees and beneficiaries. Both federal employees and military beneficiary advocacy groups would have to be part of the process.

A presumed part of the economies to be gained by a unified MHS would be the closure of redundant facilities. While in the global view a facility might be deemed redundant, it is not redundant for those who use it. At the least, its closure forces its patrons to change a use pattern; at the worst, it removes access altogether.

Other federal health care institutions and agencies would also need to adjust their relationship to a unified MHS. While the implications for these federal entities are not immediately apparent, the current fragmented system interacts with the Department of Veterans Affairs, the Health Care Financing Administration, the Bureau of Indian Affairs, the Public Health Service and a variety of federal programs. A unified voice and presence for military medicine might be welcome or threatening. A mandate for unification might be seen as a threat for still

more unification (for example, combining the MHS with the Department of Veterans Affairs health network).

Standardization of planning, measuring, resourcing, and executing would lead to greater uniformity and consistency. It would, as a byproduct, decrease the degrees of freedom now enjoyed within the individual service medical systems. Standardization in a unified MHS might have potential to drive further federal standardization, decreasing degrees of freedom in non-military federal health organizations as well. While some might welcome such standardization, others would not. Given the considerable federal underwriting of the national health care bill, the health care industry in general might well be impacted by a move at the federal level toward standardization. Such an impact would awaken the interest of organized medicine and potentially the general public.

It seems clear that the ramifications of a fully unified MHS could be very wide. Yet there is no clear way to predict either their breadth, their depth or for whom each potential impact would be positive or negative. Each faction that might be affected could become a point of resistance to unification. The prospect of such resistance should not, however, be daunting. "Never let any government imagine that it can choose perfectly safe courses; rather let it expect to have to take very doubtful ones, because it is found in ordinary affairs that one never seeks to avoid one trouble without running into another; but prudence consists in knowing how to distinguish the character of troubles, and for choice to take the lesser evil."⁷¹

For each loser in a unified MHS there would also be a winner. Trying to predict who would fall on each side of the line would be fruitless. More importantly, it would miss the critical point. The MHS has a responsibility to fulfill obligations anticipated in the new century. Failure of the military or any part of it to meet its obligations calls into question its reason for existing. All issues of winners or losers are extraneous to fundamental questions of what will be required of the MHS and whether it is presently best configured to meet those anticipated requirements. Until the basic issue of efficacy is settled, the issue of efficiency has no meaning.

LOOSE ENDS

The purpose of this paper has been to recast the major issues of the half-century MHS unification debate against a post-Cold War background. While detailing a structure for a unified MHS exceeds that scope, a satisfying sense of completeness is violated without a few additional general observations.

The three basic forms a unified system might reasonably assume would be a Defense Health Agency (DHA) — implying, for purposes of this paper, civilian control through ASD(HA); a joint military medical command — on the order of a special command (USAMEDCOM); or a separate DOD Military Medical Service — a new military medical service not part of the Army, Navy, Marines or Air Force.

This last has much to recommend it. The first two options, a DHA and a MEDCOM, would both retain medical personnel in individual service uniforms. The services have differing opinions and processes regarding career progression; the relative values of civilian versus military education; methods of officer, noncommissioned officer and enlisted evaluation; personnel management; promotion criteria; and a host of other issues. A separate DOD Medical Service with its own doctrine, regulations and policies would obviate many such issues.

The requirements of being a separate service, while a challenge, would not be an insurmountable one. The number of uniformed medical personnel in the three services is greater than the number of U.S. Marines on active duty. A separate DOD Medical Service would be larger than the Marine Corps. That it could not develop those functions necessary to succeed as a separate service is no more tenable an idea than that the Marine Corps is incapable of those functions.

The retention of individual service uniforms is a powerful implicit statement. The “meta-message” of individual service uniforms states that individuals still have or should have primary allegiance to “their service.” The negative interservice competition that so many reports have noted is in part a by-product of this allegiance and is unlikely to disappear entirely as long as the medical system brands its members as belonging to specific clubs.

Many readers will feel uncomfortable with the last half of the previous paragraph. It has a feeling of criticism of, or disloyalty to, one’s service. And each reader who feels that uneasiness should recognize it as a part of the interservice competition that has stymied, within the medical system, a more desirable degree of joint planning, joint doctrine, joint training, joint deployment, the efficient cross leveling of resources, uniform standards and process, uniform resourcing models and a long list of others.

That said, this report cannot favor, right now, the creation of separate DOD Medical Service. As earlier touched upon, the issues of winners, losers, and dollars are political issues. More critical is how the MHS can best prepare itself to be successful in the charges it will be given by Congress and the American people. While this is true, it would be folly to ignore the fact that we live in a political environment. Potential winners and losers have the capacity to derail even good and necessary change and the idea of a separate military medical service,

while probably most desirable, is for the moment too far to reach. Even in a time numbed by the size and pace of change, such a large step would provoke too great a reaction. It is doubtful that such an idea could garner the necessary support from the Army, Navy, Air Force, Congress, and the public to be adopted. Though perhaps the best option ultimately, the services, the public and Congress would need time to get used to the idea. They would likely feel more at ease with a plan for unification from which they felt they could more easily retreat, should it in execution show unanticipated flaws.

The two broad possibilities remaining then are: a DHA or a MEDCOM. ASD(HA), the presumed leader of a DHA, has historically been most heavily involved in the purchase of civilian health care. This focus, coupled with its civilian leadership, would make it highly vulnerable to military concern that it would inadequately weight the readiness mission.

Frankly of greater concern, DOD medical leadership has been inconsistent in both quality and in direction. For long and frequent stretches, an "Acting Assistant Secretary" has headed Health Affairs. Such is presently the case. While this is not in itself a bad situation, it is a marker of the importance — or lack of importance — sometimes attached to this position by the incumbent administration. The position of ASD(HA) is a third echelon presidential appointment. It has been filled at times by truly outstanding individuals, who understood the system and were committed to serving it. At other times, individuals critically lacking the necessary experience, training, knowledge of, and commitment to, the system have been granted the post in return for political service. At other times, qualified, well-meaning individuals have taken the system in a particular direction, which a successor of different political stripe has reversed upon assumption of the office.

While military commanders also serve for limited periods, they "grow up" in the system and are more likely to better understand it, its ideals, and its requirements. Commanders certainly vary, but their commonality of background would bode for better consistency than would the political appointment process. This reasoning brings us to the MEDCOM — a non-geographic, functional command — as the best option at present.

While this option suffers from the difficulties of joint systems, it seems currently a more realistically possible step to take toward the necessary goal of greater unity of purpose and execution within the MHS than any other. A joint command would initially obviate the need for the administrative infrastructure of a separate service (e.g., personnel, recruiting, purchasing and logistics support). Further, a joint command could be perceived as merely an internal reorganization with limited implications beyond the direct military system. As such, its

appearance of threat would be substantially diminished from that of a separate DOD medical service.

The issues of continuing service allegiance, different personnel evaluation methods, different promotion criteria, different career education preferences, different career pathway requirements and many other issues, would be vexing but not insurmountable. Lessons from other joint commands would offer a template for overcoming many of these problems. A system-wide joint command would relieve one of the common concerns in joint assignments — that they are less well perceived by the individual services for purposes of boards and other favorable personnel actions than assignments within one's own service.

CONCLUSIONS AND RECOMMENDATIONS

Organizations steeped in culture, history, and tradition tend to be viewed in the current moment, without much perception of the iterations that brought them to their present state. Implicit in the view-of- the-moment is that such organizations have arrived at the present point by means that validate their structure. Tampering with that structure seems a violation of history, of the wisdom of our ancestors. Yet the review of the evolution of the U.S. Military Health care System reveals that it grew, as do most organizations, not by a deliberate plan, but by responding to the requirements of the past. While the organization may be venerable, its organizational structure is subject to the common flaws of unplanned, unregulated development; and for its continued viability, it requires correction of these inevitable flaws to accord with present reality.

Many major studies over the last half-century that reviewed the organizational structure of the MHS concluded that it lacks the coordinated vision, doctrine, policy, planning, and process that would make it more efficient, more responsive and more accountable. Such conclusions were reached even in an era that emphasized joint operation less than today.

Today, jointness is not a goal or a motto, but fact. In the 21st Century, significant deployment of U.S. military forces involving only a single service is all but inconceivable. The uniqueness of mission and of the environments to which a single service might be deployed has diminished almost to the vanishing point. With the disappearance of that uniqueness, so has disappeared the argument for the importance of maintaining service specific medical systems. Their maintenance is not only no longer a necessity, but has become an impediment to the level of coordination and standardization that missions of the new millennium demand.

The first twenty-five years of the 21st Century will not be a mirror of the 20th Century. The economic landscape has changed; the political landscape has changed; the health care landscape has changed; the landscape of public consensus has changed; the security landscape has changed; the strategic landscape has changed. Thus, the context of the military medical unification debate has changed.

Momentum for substantial change in military structure has built. The passing from one era to another has compelled the U.S. military to take a critical look at itself and to commit to the restructuring necessary in the 21st Century. A joint military medical command should be a part of that restructuring.

WORD COUNT = 21,828

ENDNOTES

¹ Richard A. Gabriel and Karen Metz, *A History of Military Medicine, Vol. II, From the Renaissance Through Modern Times* (Westport, Connecticut: Greenwood Press, 1992), 118-119.

² There was a United States Marine Health Service (USMHS) from 1798-1812. The USMHS, which had a loose central organization was available to any U.S. citizen employed on the sea including members of the Navy.

³ Gabriel and Metz, 216.

⁴ David F. Burrelli, *The Feasibility of Uniting the Medical Services of the Various Branches of the Armed Forces Into a Single Corps*, Congressional Research Service Report for Congress (Washington, DC: Library of Congress, undated), p. CRS-9.

⁵ Gabriel and Metz, 267-8.

⁶ Ibid., 259-61.

⁷ David F. Burrelli, quoting from Congress, House Armed Services Committee, Subcommittee No. 2, *CHAMPUS and Military Health Care Rept.* No. 93-78, 93rd Cong. 2d Sess., December 20, 1974, p. CRS-8.

⁸ Department of Defense, *Military Compensation Background Papers*, Fifth ed. (Washington, DC: U.S. Department of Defense, September 1996), 661-6.

⁹ DOD, DHEW, OMB, *Report of the Military Health care Study* (Washington, DC: U.S. Department of Defense, 1974), 5-8

¹⁰ *Military Compensation Background Papers*, 661.

¹¹ Department of Defense, *Report of the Defense Health Agency Feasibility Study*, quoting General Eisenhower's letter to General Spaatz (Washington, DC: U.S. Department of Defense, Apr. 22, 19830, p. 2-1.

¹² The Hawley Board, *Committee on Medical and Hospital Services of the Armed Forces, Report of the Committee on That Part of its Assignment Relative to: Programs for Hospitalization in the Armed Forces and for Improvement in the Utilization of Existing Hospital Facilities* (Washington, DC: U.S. Department of Defense, 1948), 1-2.

¹³ Ibid., 27-28.

¹⁴ Department of Defense, *Defense Health Agency Feasibility Study*, p. 2-2.

¹⁵ The Hoover Commission, *The Hoover Commission Report on Organization of the Executive Branch of Government* (New York: McGraw-Hill, 1949), 335-6.

¹⁶ Association Notes, "Dr. Allen to Organize NME Medical Services Division," *Military Surgery*, vol. 105, 1949, 165.

¹⁷ Neil MacNeil and Harold Metz, *The Hoover Report 1953-1955* (New York: the Macmillan Company, 1956), 182.

¹⁸ Ibid., quoting the report of the 1st Hoover Commission, 182.

¹⁹ Ibid., 182.

²⁰ DOD, DHEW, OMB, 82.

²¹ Department of Defense, *Defense Resource Management Study* (Washington, DC: U.S. Government Printing Office, 1979), 111-112.

²² Congress, Senate. Senate Armed Services Committee: *Report #97-565 on the Uniformed Services pay Act of 1982*, 21 September 1982, 21.

²³ Department of Defense, *Report of the Defense Health Agency Feasibility Study*, 1983.

²⁴ President's Private Sector Survey on Cost Control, *Report on Federal Hospital Management*, (Washington, DC: U.S. Government Printing Office, 1983), 2.

²⁵ Report of the Joint Working Group to Consider Consolidation of Health care Functions (Washington, DC: Department of Defense, June 1990).

²⁶ Deputy Secretary of Defense Donald J. Atwood, Department of the Secretary of Defense Memorandum 20936, Nov 1990.

²⁷ Department of Defense. *Review of the Department of Defense Organization for Health Care* (Washington, DC: The Pentagon, 1991), 50.

²⁸ The Assistant Secretary of Defense for Health Affairs Enrique Mendez, Jr., Letter to the Honorable Sam Nunn conveying the Report on the Reorganization of Military Health Care, Washington, DC, 29 June, 1990.

²⁹ The Assistant Secretary of Defense for Health Affairs Enrique Mendez, Jr., Letter to the Honorable Sam Nunn conveying the Report on the Reorganization of Military Health Care, Washington, DC, 29 June, 1990.

³⁰ Chairman of the Joint Chiefs of Staff Colin L. Powell, Chairman of the Joint Chiefs of Staff Memorandum CM-958-91, Washington, DC, 28 June 1991.

³¹ Deputy Secretary of Defense Donald J. Atwood, "Strengthening the Medical Functions of the Department of Defense," memorandum, Washington, DC, October 1, 1991.

³² The DHP however is not an accurate reflection of the full cost of the MHS. It does not include costs for the benefits of uniformed health care providers (those costs continue to be borne by the services) nor the cost of those medical assets (training, equipment, facilities) organic to line units.

³³ Institute for Defense Analysis, *Cost Analysis of the Military Medical Care System: Final Report, IDA PAPER P-2990* (Alexandria, Virginia: Institute for Defense Analysis, September 1994).

³⁴ Department of Defense, Health care Quality Initiatives Review Panel Report (Washington, DC: Department of Defense, 2001).

³⁵ Richard Ross, *A Single Department of Defense Medical Service?*, Strategy Research Project (Carlisle Barracks, Pennsylvania: USAWC, 1963).

³⁶ James H. Hopkins, *A Department of Defense Health Service Agency*, Strategy Research Project (Carlisle Barracks, Pennsylvania: USAWC, 1993).

³⁷ Larry J. Godfrey, *A Unified Medical Command: The Next Step in Joint Warfare Development*, Strategy Research Project (Carlisle Barracks: U.S. Army War College, 10 April 2001).

³⁸ Steven F. Gouge, *Combat Health Support of the Transformation Force in 2015*, Strategy Research Project (Carlisle Barracks: U.S. Army War College, 10 April 2001).

³⁹ United States Army Medical Department. AMEDD After Next Joint Medical Wargame 2000. Final Report. [CDROM] Joint Panel (Fort Sam Houston, TX: U.S. Army Medical Department, 23 August 2000), Panel 2.

⁴⁰ Richard V. Ginn, "Of Purple Suits and Other Things: An Army Officer Looks at Unification of the Department of Defense Medical Services," *Military Medicine*, Vol. 143, No. 1 (January 1978), 15-24.

⁴¹ Richard Farson, *Management of the Absurd* (New York: Touchstone™, Simon and Schuster, 1997), 58-59.

⁴² Richard V. Ginn, *passim*.

⁴³ General Accounting Administration, *Defense Health Care: Tri-Service Strategy Needed to Justify Medical Resources for Readiness and Peacetime Care*, Letter Report, GAO/HEHS-00-10 (Washington, DC: General Accounting Office, November 1, 1999), 4-5.

⁴⁴ Alan Beyerchen, "Clausewitz, Nonlinearity, and the Unpredictability of War," *International Security* 17:3 (Winter 1992), 63.

⁴⁵ *Ibid*, 67, 73-77, 90.

⁴⁶ Department of Defense, *MHS 2025, A Report to the Senior Leadership of the MHS: Toward a New Enterprise* (Washington, DC: U.S. Department of Defense, December 1999), 3-1.

⁴⁷ Ibid., p. 1-1.

⁴⁸ William J. Clinton, *A National Security Strategy for a New Century* (Washington, DC: The White House, December 1999), p2-3.

⁴⁹ Hugh Shelton quoted by Paul J. Smith, "Transnational Security, Threats and State Survival: A Role for the Military?", *Parameters*, Vol. XXX, NO. 3 (Autumn 2000), 77.

⁵⁰ H.R. Shepherd and Peter J. Hotez, "Return of a Vanished Virus," *The Washington Post*, 27 September 2000, Sec. A, p. 23.

⁵¹ Paul J. Smith, "Transnational Security, Threats and State Survival: A Role for the Military?", *Parameters*, Vol. XXX, No. 3 (Autumn 2000), 80.

⁵² Ibid., 84.

⁵³ Sandy Berger, quoted by Jim Hoagland, "The World According to Clinton," *The Washington Post*, 26 November, 2000, Sec. B, p. 7.

⁵⁴ MHS 2025, *A Report to the Senior Leadership*, 1-1.

⁵⁵ William M. Daley, "Reinvented But Still Redundant," *The Washington Post*, March 12, 2001, p. A17.

⁵⁶ Cowdrey, Albert E., *United States Army in the Korean War, The Medics War* (Washington, DC: Government Printing Office, 1987), 16-17.

⁵⁷ It might be argued that Communist China influenced our security policy as well. I would argue that our policies toward China were merely an extension of our policies toward the Soviet Union.

⁵⁸ MHS 2025, *A Report to the Senior Leadership*, p. 1-5.

⁵⁹ Ibid., p. 3-1.

⁶⁰ Ibid., p. ES-1.

⁶¹ Ibid., p. 3-1.

⁶² Ibid., p. ES-1.

⁶³ Ibid., p. ES-1.

⁶⁴ Ibid., p. ES-2.

⁶⁵ I was told, by this Flag Rank source, that such situations did not persist, and occurred predominantly in the early deployment when not all support assets were in place and some medical units felt their service capacities could only accommodate local members of their own service.

⁶⁶ Conversation with a senior Air Force Medical Officer who has an extensive operational background and who participated in the Air Force medical response to the call of Operation Desert Shield.

⁶⁷ CINFOR CONPLAN: INTEGRATED CONUS MEDICAL MOBILIZATION PLAN (ICMMP), HQ Forces Command, Ft. McPherson, GA, July 1990, p. iv.

⁶⁸ Under current organizational structure, medical planning is a subset of logistical planning and thus has usually low and frequently inconsistent visibility in war-fighting exercises.

⁶⁹ MHS 2025, *A Report to the Senior Leadership*, p. ES-1.

⁷⁰ Priscilla H. Hamilton, *The Need for a Medical Foreign Area Officer Program*, Strategy Research Project (Carlisle Barracks: U.S. Army War College, 10 April 2001).

⁷¹ Niccolo Machiavelli, *The Prince*, trans. W. K. Marriott (New York: Alfred A. Knopf, Inc., 1992), 105.

BIBLIOGRAPHY

- Association Notes. *Dr. Allen to Organize MME Medical Services Division*. Vol. 105. Military Surgeon, August 1949.
- Association of the United States Army. *Department of defense reorganization Act of 1986: A Primer*. Arlington, Virginia: Association of the United States Army, undated.
- Atwood, Donald J., Deputy Secretary of Defense. "Strengthening the Medical Functions of the Department of Defense." Memorandum for the Secretaries of the Military Department s, Chairman, Joint Chiefs of Staff, et. al. Washington, DC, 1 October 1991.
- Beyerchen, Alan, "Clausewitz, Nonlinearity, and the Unpredictability of War." *International Security* 17:3 (Winter 1992), 59-90.
- Bowen, Thomas E., ed. *Emergency War Surgery*, 2nd U.S. Revision. Washington, DC: U.S. Department of Defense, 1988.
- Berger, Sandy. Quoted in Jim Hoaglund, The World According to Clinton. *The Washington Post*, 26 November 2000 Sec. B, p. B7
- Burrelli, David F. *The Feasibility of Uniting the Medical Services of the Various Branches of the Armed Forces Into a Single Corps*. Congressional Research Service Report for Congress. Washington, D.C, Library of Congress, 2 August 1993.
- Cheney, Dick, Secretary of Defense. *Defense Management Report to the President*. Washington, DC: The White House, July 1989.
- CINFOR CONPLAN: INTEGRATED CONUS MEDICAL MOBILIZATION PLAN (ICMMP). HQ Forces Command, Fort McPherson, GA, July 1990.
- Clinton, William J. A National Security Strategy for a New Century. The White House, December 1999.
- Committee on Medical and Hospital Services of the Armed Forces. *Programs for Hospitalization in the Armed Forces and for Improvement in the Utilization of Existing Hospital Facilities*. Washington, DC: Office of the Secretary of Defense, 1948.
- Congress. Senate. *Senate Armed Services Committee Report on the Uniformed Services Pay Act of 1982*, 1982.
- Cowdrey, Albert E. *United States Army in the Korean War, The Medics War*. Washington, DC: Government Printing Office, 1987.
- Daley, William M. "Reinvented But Still Redundant." *The Washington Post*, March 12, 2001, Sec. A, p. A7.
- Department of Defense. *Commission on Roles and Missions of the Armed Forces*. Washington, DC: Department of Defense, 24 May 1995.

- Department of Defense, *Defense Health Agency Feasibility Study*. Washington, DC: Department of Defense, 22 April 1983.
- Department of Defense, *Defense Management Report Decision, No. 970. Management of Defense Health Care*. Washington, DC: Department of Defense, 4 October 1990.
- Department of Defense. *Defense Resource Management Study*. Washington, DC: Department of Defense, 1979.
- Department of Defense. MHS 2025, A Report to the Senior Leadership of the Military Medical System : Toward a New Enterprise. Washington, DC: U.S. Department of Defense, December 1999.
- Department of Defense. *Military compensation Background Papers, 5th ed.* Washington, DC: Department of Defense. September 1996.
- Department of Defense. *Review of the Department of Defense Organization for Health Care*. Washington, DC: The Pentagon, March 1991.
- DOD, SHEW. OMB. *Report of the Military Health Care Study*. Washington, DC: U.S. Department of Defense. December 1975.
- Emmerich, Herbert. *Essays on Federal Reorganization*. Birmingham, Alabama: University of Alabama Press, 1950.
- Farson, Richard, *Management of the Absurd-Paradoxes in Leadership*. New York: Simon and Schuster. 1997.
- Federal Advisory Committee. DOD Health care Quality Initiatives Review Panel Report. Washington, DC: Department of Defense, 2001.
- Gabriel, Richard A. and Metz Karen S. *A History of Military Medicine, Vol. II, From the Renaissance Through Modern Times*. New York" Greenwood Press, 1992.
- General Accounting Office, Defense Health Care: Tri-Service Strategy Needed to Justify Medical Resources for Readiness and Peacetime Care, Letter Report, GAO.HEHS-00-10. Washington, DC: U.S. General Accounting Office. 1 November 1999.
- Gervasi, Frank. Big Government: the Meaning and Purpose of the Hoover Commission Report. New York" McGraw-Hill, 1949.
- Ginn, Richard B. "Of Purple Suits and Other Things: An Army Office Looks at Unification of the Department of Defense Medical Services," *Military Medicine* Vol. 143, No. 1 (January 1978), 15-24.
- Godfrey, Larry J. *A Unified Medical Command: The Next Step in Joint Warfare Development, Strategy Research Project*. Carlisle Barracks: U.S. Army War College, 10 April 2001.

- Gouge, Steven F. *Combat Health Support of the Transformation Force in 2015*, Strategy Research Project. Carlisle Barracks: U.S. Army War College, 10 April 2001.
- Hamilton, Priscilla H. *The Need for a Medical Foreign Area Officer Program*. Strategy Research Project. Carlisle Barracks: U.S. Army War College, 10 April 2001.
- The Hoover Commission Report on Organization of the Executive Branch of the Government. New York: McGraw-Hill, 1949.
- Hopkins, James H. *A Department of Defense Health Service Agency*. Strategy Research Project. Carlisle Barracks: U.S. Army War College, 21 March 1993.
- Institute for Defense Analysis. *Cost Analysis of the Military Medical System*. Alexandria, Virginia: Institute for Defense Analysis, September 1994.
- Ledford, Frank. Surgeon General of the Army, "Response to Concept Paper on DMR Initiative (Defense Health Agency)." Note and paper to Enrique Mendez Jr. M.D., Assistant Secretary of Defense for Health Affairs, Washington, DC, 21 June 1990.
- Machiavelli, Niccolo. *The Prince*. Translated by W.K. Marriott. New York: Alfred A Knopf, Inc. 1992.
- Macniel, Neil and Metz, Harold W. eds. *The Hoover Report 1953-55*. New York: the Macmillan Company, 1956.
- Mendez, Enrique, Jr. "Establishment of Joint Working Group to Consider Consolidation of Health Care Functions." Memorandum for Secretaries of the Military Departments, Chairman of the Joint Chiefs of Staff, Comptroller of DOD. Washington, DC, 26 August 1991.
- Mendez, Enrique, Jr. "Letter to the Honorable Sam Nunn" from the Assistant Secretary of Defense for Health Affairs Conveying the Report on the Reorganization of Military health Care, 29 June, 1990.
- Office of the Assistant Secretary of Defense for Health Affairs. *Report of the Joint Working Group to Consider Consolidation of Health care Functions*. Washington, DC: Office of the Assistant Secretary of Defense for Health Affairs, June 1990.
- Office of the Assistant Secretary of Defense for Health Affairs. Report on the Reorganization of Military Health Care. Washington, DC: The Pentagon, June 1990.
- Office of the Surgeon General of the Air Force. "Concept Paper on FY 1992 Defense Management Report (DMR) Initiatives – defense Health Agency". Washington, DC: Office of the Surgeon General of the Air Force, 6 July 1990.
- Office of the Surgeon General of the Army. *AMEDD of the Past and Present (FY 96 and Before)*, Vol. I. Falls Church, Virginia: Office of the surgeon General of the Army, 1996.
- Office of the Surgeon General of the Army. *AMEDD of the Near Term (FY 2003)*, Vol. II. Falls Church, Virginia: Office of the surgeon General of the Army, 1996.

Office of the Surgeon General of the Army. *AMEDD of the Future (FY 2010 and Beyond)*, Vol. III. Falls Church, Virginia: Office of the surgeon General of the Army, 1996.

O'Keefe, Sean O., Comptroller of the Department of Defense. "FY 1992 Defense Management Report (DMR) Initiatives." Memorandum to the Secretaries of the Military Departments, Chairman of the Joint Chiefs of Staff, et. al. Washington, DC, 30 May 1990.

Pollock, Gail. A Joint Medical Command (JMC). Information Paper presented to the Surgeon General of the Army. Falls Church, Virginia: Office of the surgeon General of the Army, 24 April 1999.

Powell, Colin L., Chairman of the Joint Chiefs of Staff. "Organization of Department of defense Medical Care. Memorandum to the Deputy Secretary of Defense. Washington, DC, 28 June 1991.

es

President's Private Sector Survey on Cost Control. *Report on Federal Hospital Management*. Washington, DC: Government Printing Office, 1983.

Ross, Richard H. *A Single Department of Defense medical Service?* Strategy Research Project. Carlisle Barracks: U.S. Army War College, 8 March 1963.

Senge, Peter M. *The Fifth Discipline*. New York: Doubleday, 1990

Shepherd, H.R. and Hotez, Peter J. "Return of a Vanished Virus" *The Washington Post*, 27 September 2000, Sec. A, p. A23.

Soule, Robert R. Director of Programs Analysis and Evaluation, Department of Defense. "733 Update – Final Report." Memorandum for the Deputy Secretary of Defense. Washington, DC, 10 May 1999

Smith, Paul J. "Transnational Security. Threats and State Survival: A Role for the Military? *Parameters*, Vol. XXX, No. 3 (Autumn 2000) 77-91

Surowiecki, James. "You Can't Always Get What You Want." *New Yorker* (30 October 2000) 46

United States Army Medical Department. AMEDD After Next, Joint Medical Wargame 2000. Final Report. [CDROM] Fort Sam Houston, TX: U.S. Army Medical Department, 23 August 2000.